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IMPLEMENTATION OF THE GOVERNMENT PERFORMANCE AND RESULTS ACT AT DLA: A CASE STUDY ANALYSIS

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The Government Performance and Results Act of 1993 (GPRA) is legislation passed in response to growing concern over the efficiency and effectiveness with which the federal government performs its functions. Under GPRA, all federal agencies will be required to submit annual performance plans and reports starting in September of 1997 for the FY99 budget request. As a major agency, DoD will be required to submit these performance plans and reports. The act requires pilot projects as a test of performance planning and reporting.

This thesis is an analysis of the performance plan/report pilot project currently in progress at the Defense Logistics Agency. Included is an examination of the two performance plans already submitted by DLA. This thesis analyzes the performance measures used, the performance measurement system, and the performance plan format. Central to the thesis is an evaluation of the process involved in implementing GPRA by the employees and managers of DLA.

Other data provided is a definition of performance budgeting, definitions of various performance measures, a history of budget reforms which used performance measures as a means of improving government programs and finally, an analysis of the other DoD pilot project performance plans.

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IMPLEMENTATION OF THE GOVERNMENT PERFORMANCE AND RESULTS ACT AT DLA: A CASE STUDY ANALYSIS

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ABSTRACT

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I. INTRODUCTION

A. BACKGROUND

Confronted by the twenty-sixth straight year of deficit spending and a four trillion dollar national debt, government officials seem increasingly aware of the declining public tolerance for such conditions. This has led to several attempts in recent years at reducing annual budget deficits. Most notable among these were the Gramm-Rudman-Hollings Act and amendment in 1985 and 1987 respectively and the Budget Enforcement Act of 1990 and 1993. While the Budget Enforcement Acts resulted in promises of nearly $ 1 trillion in deficit reduction, all four measures have failed to produce the balanced budget originally sought (Berner and Daggett, 1993, pp.39-40). The failure of the federal government to reconcile this problem has led to a question of the effectiveness and efficiency with which the federal government operates.

This interest in how the federal government performs its various activities has in turn resurrected the concept of performance measurement and its possible effects on the budgetary process. At least four different efforts have stimulated a move toward performance measurement; these include the application of financial reforms for federal management included in the Chief Financial Officers Act, the National Performance Review led by Vice President Gore, the 1992 Defense Authorization Act and the Government Performance and Results Act of 1993 (GPRA), which called for the creation of federal agency performance plans.

The Chief Financial Officers Act of 1990 requires the designation of a chief financial officer (CFO) in each of the major executive agencies of the federal government. This act charges the CFO, as one of his primary duties, to

"develop and maintain an integrated agency accounting and financial management system ... which - provides for - the systematic measurement of performance. (P.L. 101-576, 1990) The act does not specify how or what to measure, but does make performance measurement a primary goal.

Secondly, the National Performance Review concluded the government should use budgeting as a means of improving program effectiveness and results. It urged the President to negotiate performance agreements with agency heads, and specify what should be accomplished with the given resources over the next several years. (National Performance Review, 1993) Those critical of the National Performance Review say the report is clear about what it is against, but becomes vague when it suggests how to fix these areas. Nonetheless, the report established the importance of performance measurement in the budget process as a major milestone for government improvement.

Thirdly and most recently, Congress has passed two pieces of legislation which deal with performance measurement. The FY93 "National Defense Authorization Act" under subtitle D requires the Secretary of Defense to "develop performance measures and corresponding performance goals for each business area..." of the Defense Business Operations Fund (DBOF)(P.L. 102-484, 1992). Performance measurement and budgeting seem appropriate in this endeavor since the Department of Defense is attempting to more closely model private industry in its operations and control of the DBOF.

On August 3rd, 1993 Congress passed P.L. 103-62, the Government Performance and Results Act (GPRA). The purpose of the act is to shift the focus of government management from inputs to outputs and outcomes, from process to results, from compliance to performance, and from management control to managerial initiative. The act requires all

federal agencies to define long term goals, set annual performance targets derived from these goals, and annually compare actual performance to the targets. The act also establishes three sets of pilot projects within the federal government: performance plans and reports, enhanced managerial flexibility and accountability, and performance budgeting. (P.L. 103-62, 1993) In short the act requires a significant change in the way we think about management and budgeting in the federal government.

These four different initiatives have shown the significant increase in concern over performance issues within the federal government. This thesis will concentrate primarily on the implementation of the GPRA within the Department of Defense (DoD). The GPRA was chosen over the others, because it requires a systematic approach to the performance issue. The next section will describe the focus of the thesis.

B. THESIS SCOPE AND APPROACH

The objectives of this thesis are to:

- examine the background of performance measurement
- compare several DoD pilot projects under the GPRA
- examine the process used for GPRA performance measurement at the Defense Logistics Agency (DLA)
- to assess how GPRA performance measurement might be implemented throughout the DoD

DLA was chosen for the detailed case study analysis because it was one of the first pilots selected and because the management of DLA had volunteered to do so. This establishes a strong desire by the agency to make the GPRA work and thus a qualified model to investigate.

Chapter II provides the legislative history of the Government Performance and Results Act in 1993. Additionally, several different measures of performance will be reviewed along with a definition of performance budgeting. The budget definition is included since the premise of GPRA is that some day performance budgeting will be used as the primary means for resource allocation within the federal government.

Chapter III will present a history of budget reforms over the past century. These reforms, like GPRA, also attempted to use performance measurement as a means of improving federal government performance.

Chapter IV will be an analysis of the DoD implementation of the GPRA. Specific emphasis will be given to the seven pilot projects currently in progress under the auspices of the GPRA. A comparison of the performance measures used will be provided. A look at how DoD is implementing GPRA on the corporate level is also provided.

Chapter V will be a detailed analysis of the Defense Logistics Agency's attempt at implementing the GPRA. This chapter is based on interviews with several individuals at the corporate headquarters and at field activities. The discussion focuses on answering the below questions within the context of the DLA pilot project. In the case study, the following questions will be researched:

- How were performance measures captured?
- How did the process of measurement work in the eyes of the individuals involved?
- What are the strengths and weaknesses of the system?
- What were the expectations for how the process would work? How did the system work?

- How can performance measures be used to complement a budget?
- How can this information be used to help the DoD and the DoN develop future performance measures and budgets?

Chapter VI contains the conclusions reached in this study. Suggestions and recommendations for implementation of the GPRA within the DoD and DoN will be provided.

II. GPRA AND PERFORMANCE MEASUREMENT

A. LEGISLATIVE HISTORY OF GPRA

This section of the thesis will detail the more recent legislative history leading up to the GPRA. On October 3, 1990, Senator William Roth introduced S.3145, the Federal Program Performance Standards and Goals Act of 1990. The 101st Congress decided not to take action on the bill during that particular session. This however, proved to be the start of a resurgence of interest in federal government performance measures. S.20 was introduced at the start of the 102nd Congress in the exact same form as it had been in the previous Congress. Two hearings were held by the Senate Committee on Governmental Affairs where the bill was sponsored by Senator John Glenn, chairman of the committee.

At Senator Glenn's request, several studies were performed to gain some insight into the uses of performance measurement and budgeting. Two important studies in this area were completed by the General Accounting Office. The first, entitled "Program Performance Measures, Federal Agency Collection and Use of Performance Data" was an study to gauge the current use of performance measures throughout the federal government. The second, entitled "Performance Budgeting, State Experiences and Implications for the Federal Government" was a study of state experiences with performance measurement and budgeting. Both studies discovered that in general performance measures were not used as often as respondents had actually claimed and that performance budgets were not used in a pure format. Still the 102nd Congress did not act to pass the bill into law.

During the 103rd Congress, S.20 again was introduced. This time, however, a few changes had been made and the name was shifted to the Government Performance and Results Act. A similar bill was also introduced in the House by

Representative John Conyers, Chairman of the Government Operations Committee. His bill, H.R. 826, was nearly identical to the Senate version. Committee hearings were held on both bills and they eventually made it to the full House and Senate for vote. H.R. 826 passed the full House on 25 May 93 by unanimous consent. Likewise, S.20 passed the full Senate on 23 June 93 also by unanimous consent. The House approved the Senate version on 15 July 93 clearing the way for the bill to become law. The Government Performance and Results Act of 1993 became law on 3 August 93 with the signing by President Clinton. A press conference was held during the signing at which the President held high hopes for the new law by exclaiming:

> *...to the extent that our government works with greater efficiency and effectiveness and less unnecessary cost, it will strengthen the American economy as well as the bonds of our citizenship.* (Office of the Press Secretary, 1993)

Table 1 spells out briefly the requirements for performance measurement and budgeting contained in the GPRA of 93.

As can be seen by Table 1, performance plans (i.e., performance measures) will be required by all federal agencies in 1997. Also occurring in 1997 will be the selection of a few agencies to serve as pilot projects in performance budgeting. The next section of the thesis will describe performance budgeting since this is the ultimate goal of GPRA. Along with the budget definition, several different forms of performance measures will be defined and illustrated. Additionally, some examples of budgets containing performance data will be used to illustrate what some government agencies have used in the past.

Table 1: GPRA Requirements

YEAR	OBJECTIVE
1993	Selection of at least ten agencies as pilot sites for testing performance plans and reports.
1994	At least five of these agencies selected as pilot sites for testing managerial accountability/flexibility.
1997	OMB reports to Congress on pilot results, GAO reports to Congress on readiness for full implementation.
	All Federal agencies submit 5-year strategic plans.
	All Federal agencies submit annual performance plan for FY99.
	Selection of at least 5 pilots for performance budgeting.
1998	OMB submits gov't wide performance plan for FY99 to Congress.
2000	Agencies submit annual performance reports for FY99.
2001	OMB reports to Congress on pilot test of performance budgeting.

Source: P.L. 103-62, 1993

B. PERFORMANCE BUDGETING AND MEASURES DEFINED

Performance budgeting requires an agency to develop objectives or goals which it desires to accomplish. The cost of the programs required to perform those objectives and quantitative data measured to ensure the objective is in fact accomplished in an effective and efficient manner are also important. The key objective of performance budgeting itself is to produce a financial and managerial atmosphere that will assist managers with appropriate information and accountability to reduce costs while achieving objective levels of performance (Shycoff, 1992).

The following is a generally accepted prescription for the implementation of program and performance budgeting:

- Identify programs and program costs.
- Break down the programs into smaller units called sub-programs, activities and cost centers.
- Develop units of measurement for the work to be done for each activity.
- Measure the work to be done for each activity and the time and cost required to accomplish this work. This requires a work measurement system and an accounting system that accumulates these values.
- Develop unit times and unit costs for each activity, (historical data or standards should be used).
- Summarize all the data in a work program for each activity: work to be done, units of measurement, unit time and cost, total time and cost, etc.
- Use the work program for each activity or cost center to develop the agency budget.
- Appropriate funds by program.
- Report and compare actual performance and cost with projected values.
- Use quarterly performance reports in budget implementation as a basis for allocating funds to agencies.
- Determine the extent to which the achievement of the targets for each activity led to the attainment of the short and long term program goals. These are measures of effectiveness, quality and results.

(Source: Axelrod, Budgeting for Modern Government, pp. 267)

As can be seen by this list, performance budgeting focuses on efficiency accountability. In other words, this type of budget aims to assist managers in wisely spending money such that maximum output is achieved with as little input as possible. Notice also the focus shifts from objects of expenditure to program activities as the basis for budgeting. Therefore, instead of budgeting for salaries, utilities, and travel expenses; the manager would

base the budget upon educational activities, regulation, research, executive direction, etc. (Wanat, 1978, pp. 95-98)

Once the programs have been broken down into activities, measurements for performance must be generated for program evaluation. The Comptroller of the DoD has defined five generic performance measures to be implemented in context with performance budgeting. (Shycoff, 1992) These measures are input, workload, efficiency ("doing the thing right"), effectiveness ("doing the right thing"), and impact/outcome measures. **Figure 1** is an example of some of the performance measures used by the Defense Logistics Agency (DLA) in gauging the performance of their distribution function. This Figure will be referred to as each type of measurement is explained. Input measures describe the resources, time, and personnel used for a program. Such items as appropriated dollars, end strength, and staff training hours, fit into this category.

If no other type of measure is provided, then as a bare minimum some measures of workload should be presented. Such items as number of checks issued, number of arrests made, or licenses issued would suffice as measures of workload. In the DLA example, no measure of workload is presented. This is not bad, since workload measures are really the lowest form of performance measurement desired. While workload measures do describe the activities of a program, they do not really define how well the program is accomplishing its mission.

Measures of efficiency take the workload data and merge it with cost data in order to develop unit cost measures. Then efficiency can be gauged on such items as cost per arrest made, cost of issuing a check, cost of flying an aircraft per hour, etc. In the DLA case, the "Depot Line Rate" is the charge to an inventory control point per unit of distribution work performed (e.g., lines received,

Responsiveness	Baseline	FY95 Target	FY96 Target
Indicator: Denial Rate	.74%	≤ 0.8%	≤0.8%
Logistics Operation(S)			
Receiving and Shipping			

Timeliness	Baseline	FY95 Target	FY96 Target
Indicator: MRO Processing Time	Not Available	≤ 1 day High Priority	≤ 1 day
Logistics operation:	Not Available	≤ 7 days	≤ 6 days
Receiving and Shipping		Routine	

Quality	Baseline	FY95 Target	FY96 Target
Indicator: Customer Complaints			
Logistics Operation:	Not Available	.08%	.05%
Receiving and Shipping			

Operating Efficiency	Baseline	FY95 Target	FY96 Target
Indicator: Inventory Accuracy	Not Available	85%	90%
Logistics Operation			
Storage Operations			
Indicator: Space Utilization	84%	85%	85%
Logistics Operation			
Storage			

Financial Performance	Baseline	FY95 Target	FY96 Target
Indicator: Depot Line Rates	$27.75	$27.60	$27.43
Logistics Operation			
Receiving and Shipping; Storage			

Customer Satisfaction	Baseline	FY95 Target	FY96 Target
Indicator: Customer Satisfaction Index	Not Available	82%	85%
Logistics Operation			
All			

Note: A corporate level baseline survey will be sent to approximately 32,000 DLA customers this year. Results of the survey are expected to provide quanitative information from which to develop a customer satisfaction index target.

Figure 1: DLA Performance Measures

Source: DLA FY95 Performance Plan, 1994

issued, etc.). Efficiency is a much better indicator of performance than simple workload data since it gives outputs a direct cost relationship. These costs per unit can then be compared over time or against other similar activities to gauge competitiveness or improvement. This is extremely important since it allows administrators a simple way to keep track of complex programs at a smaller level, Congress can track efficiency measures to keep costs down, and the public can be assured its taxes are being spent effeciently.

Effectiveness measures are used to mark output conformance to specified characteristics. Such items as quality, timeliness, and customer satisfaction fall into this particular category of measures. In Figure 1, "Material Release Order Processing Time" and "Customer Satisfaction" are examples of effectiveness. These measures require the managers to determine goals for the particular program activity. Moreover, these types of measures require managers to identify who their customers are and what type of characteristics customers would desire within the products. Effectiveness measures are better than efficiency measures in that the primary focus of effectiveness is on the customers, whereas the primary focus of efficiency is the organization.

The last type of measure to be looked at within a performance budget is the outcome,impact or result. This measure has proved to be the most difficult to develop. Outcome measures attempt to capture performance on the basis of achieving what the program desired to do as a whole. Simply put, did the program achieve the mission it set out to do from the start?

In the case of the DLA measures, no true measure of outcome is provided. DLA's mission is to provide the U.S. armed forces with the appropriate level of materials in order to carry out a military action. Therefore, the only

true measure of outcome would be to wait for a military action and see if the U.S. services were provided with the material required. Short of war managers must develop the closest thing to outcome measures they can. This might mean establishing an intermediate outcome. For example, a cancer treatment facility may have as its primary mission to reduce the reoccurrence of cancer in its patients. In order to gauge success, it might attempt to track previous patients who develop cancer again at a later date, then compare this number to the total number of patients it has treated.

Finally, a "pure" performance budget should consist of activity classifications, workload data, other measures of performance, unit costing data, and program goals. Other data typically found in budgets which are modeled after performance budgets consist of narratives discussing the activity or program, several years' worth of data, mission statements, and outcomes desired. It should be noted most budgets which are called performance budgets are not of the pure format. The examples in **Figures 2** and **3** are budgets which contain performance data but still retain traditional data as well. Thus they are a hybridization of performance and traditional budgets. It can be observed that in both cases, the traditional object of expense is present as well as the performance indicators. Measurements used in these budgets consist of unit cost data (or efficiency), such as the "annual per capita cost" for the Patuxent Institute, and workload data, such as the "man-days required to lay patch with premix" in the highway budget. Notice also the rather extensive narrative associated with the Patuxent Institution's budget. Notable by their absence are measures for effectiveness and outcomes.

This section has given a definition of performance budgeting and different types of performance measures associated with those budgets. The chapter was used to give

some background into the current rejuvenation performance measurement and budgeting have found in the Government Performance and Results Act. It should be noted that all past attempts at instituting performance budgeting have failed on a full scale level. While GPRA does not mandate performance budgets, it is a step in that direction. From its unanimous votes in both the House and Senate it appears to be here for the near future. Thus federal agencies need to prepare for the inevitable performance issues soon to be mandatory. On the other hand, history has shown that it is extremely difficult to enact changes in the current budgetary process. The next chapter will show the difficulty associated with such attempts.

Example of program and performance budgeting for highway maintenance.

A: State maintenance performance budget summary for top management.

Code	Maintenance Activity	Work Program: In Work units	Work Program: In man-days	Object of Expenditure: Labor	Object of Expenditure: Equipment	Object of Expenditure: Materials	Object of Expenditure: Contractul Services	Total Budget
101	Roadway Surface Patch with premix	3,500 tons mix	2,800	67,200	11,200	21,000	-	99,400
102	Patch with premix	32,000 tons mix	2,090	50,200	43,900	192,000	-	286,100
103	Deep patch with premix or full depth replacement	7,000 tons mix	1,285	30,800	36,200	42,000	-	109,000

B: State maintenance performance budget summaries for legislature and executive.

Maintenance activity group	Object of Expenditure (in Thousands of dollars): Labor	Equipment	Materials	Contractual Services,tec.	Total budget	Expenditure percentage
Roadway Surfaces	1,415	1,022	1,260	321	4,018	26
Shoulders/Sides	208	189	221	-	618	4
Drainage	391	170	210	-	771	5
Roadside	1,100	510	398	-	2,008	13
Major Strut.	307	67	90	-	464	3
Snow/ice Control	602	1,300	1,648	-	3,550	23
Traffic Services	998	390	774	-	2,160	14
Extraordinary	63	61	28	-	152	1
Service func/ohd	1,057	226	97	160	1,540	10
Betterment	91	45	13	-	149	1
State Maint. Budget	6,230	3,980	4,739	481	15,430	100
Expenditure %	40	26	31	3		100

Source: Roy Jorgensen Associates, Performance Budget Systems for Highway Maintenance Management (Washington, D.C.: Highway Research Board, 1972), pg.27

Figure 2: Highway Maintenance Performance Budget

GENERAL ADMINISTRATION-PATUXENT INSTITUTION

Program and Performance:

Patuxent Institution, established at Jessup, Maryland in 1954, is a maximum security insitution with a physical capacity of 640 patients. An Outpatient Clinic Service and a Halfway House located in Baltimore City, provide continued treatment and support for pre-parole and paroled patients. The Institutional Board of Review and the Board of Patuxent Istitution are funded under this program. Responsibilit for the review of each patient and the authority to grant periodic leaves and parole to selected individual patients is vested in the Institutional Board of Review, a multidiscipline review authority established by statute. The Board of Patuxent Institution provides general conslutative and advisory services on problems and matters relating to the Institution to both the staff of the Institution and the Secretary. The General Adminstration program provides for the executive direction and supervision of the operating departments and programs for the entire Institution. Responsibility for overall planning, development and the review of the major functions of the Institution such as confinement, diagnosis, treatment and research, as well as personnel adminstration, fiscal management, supply procurement and distribution, communication and related services are provided in this program.

	Actual 1974	Actual 1975	Estimated 1976	Estimated 1977
Units of Measurement:				
Average Daily Population	455	476	525	510
Admissions	325	201	300	275
Discharges	240	205	240	250
Annual Per Capita Cost.	$11,788	$12,682	$11,501	$12,058
Daily Per Capita Cost..	$ 33.30	$ 34.75	$ 31.42	$ 33.04

Appropriation Statement:

	1975 Actual	1976 Appropriation	1977 Allowance	
Number of Authorized Positions	20	21	21	
01 Salaries and Wages	220,997	246,123	252,326	
02 Technical and Special Fees.	7,300	6,000	8,800	
03 Communication	12,968	12,700	14,650	
04 Travel	1,995	3,500	2,700	
08 Contractual Services	34,542	69,622	38,600	
09 Supplies and Materials	15,133	13,350	14,000	
10 Equipment-Replacement	.....	920	570	
11 Equipment-Additional	913	40	.....	
13 Fixed Charges	751	57,473	99,138	
Total Operating Expenses	66,302	157,605	169,658	
Total Expenditure	294,599	409,728	430,784	
Original General Fund Appropriation	293,862	398,898		
Transfer of General Fund Appropriation	1,457	10,830		
Total General Fund Appropriation	295,319			
Less: General Fund Reversion..	720			
Net General Fund Expenditure..	294,599	409,728	430,784	
General Fund Appropriation				430,784

Figure 3: Patuxent Institute Performance Budget

III. PERFORMANCE MEASUREMENT AND BUDGET REFORM

The Government Performance and Results Act of 1993 requires all federal agencies to submit a performance plan by September of 1997. This is to be included in the FY99 budget submission for the agencies.(P.L. 103-62, 1993) The apparent long term goal for GPRA is to implement performance budgeting as a means of resource allocation for federal agencies. This is readily identified by the performance budget pilot projects which are to be conducted in FY98 and FY99. Because the "final product" of the GPRA is presumed to be performance budgeting, this thesis will now give a brief synopsis of the budgetary reforms of the past century. The common thread between the reforms included is the attempt to raise the level of efficiency and effectiveness by which the government operates via performance measurement of some sort.

In his book "Budgeting for Modern Government", Donald Axelrod identifies eleven major budget reforms which have occurred since the turn of the century. (Axelrod, 1988, pg. 259) These reforms consisted of:

- Executive Budgets
- Functional Budgets
- Program and Performance Budgets
- Multi-year Expenditure Projections
- Unified or Comprehensive Budgets
- PPBS (Planning, Programming Budget System)
- MBO (Management by Objective)
- Productivity Budgets
- ZBB (Zero Based Budgets)

- Budgets as Tools for Economic Management
- Legislative Budgets

Figure 4 is a time-line which shows the approximate starting date for the major reforms discussed in this thesis. This is the year in which the reform started receiving considerable consideration or was in fact adopted. Some of the more important budget legislation enacted and the requirements of GPRA are also included.

Date	Event
1921-	- Executive Budget; Budget and Accounting Act
1948-	- Functional Budget
1949-	-Performance/Program Budgets; Budget/Accounting Procedures Act
1961-	- PPBS, DoD
1965-	- PPBS, all federal
1971-	- Management By Objective (MBO)
1974-	- Executive, Congressional Budget Act
1977-	- Zero-Based Budget (ZBB)
1980-	- Budget for Economic Management
1993-	- Government Performance and Results Act
1994-	- Performance Plan pilots commence
1995-	- Managerial Accountability pilots commence
1998-	- Performance Budget pilots commence
2001-	- Decision on performance budget pilots

Figure 4: Budget Reform Time-line

The most enduring budget reform is the executive budget instituted by the Budget and Accounting Act of 1921. This was an attempt to consolidate the previously fragmented budget process into a cohesive system as developed by the chief executive. (Axelrod, 1988, pg. 260) Prior to this act, the various committees in Congress with oversight of a particular program would entertain budgets from each federal government agency separately via the Treasury Department. These budgets were handed out in lump sums with little or no executive branch attention.

The Budget and Accounting Act of 1921 specifically tasked the President to submit a budget, including estimates of expenditures, appropriations, and receipts for the ensuing year. The Bureau of the Budget (BOB) was also created in the Treasury Department. (Lynch, 1995, pp. 40-42) A line-item of expense format was used as the basic building blocks for the executive budget. This required each agency or responsibility center to arrange its budgets into categories such as salaries, insurance, office supplies, medical expenses,etc. These are the items required to run the government process and the sum of money needed annually to purchase them is thus identified.

The idea of having the chief executive responsible for budgeting seems like a tremendous one. However, the format used for arranging the budget is not necessarily the best one available in the eyes of many observers. From the moment of its inception, executive budgeting came under intense criticism. The critique of this budget process was summed up by Lent D. Upson as follows:

> *It focused on inputs (money, staff, materials) instead of outputs or results. No program objective was used as a goal and therefore what was to be accomplished was not defined. (Upson, 1924, pg. 73)*

Still other reformers noted that the budget format focused on marginal changes and not on periodic review of efficiency and effectiveness of governmental programs (Axelrod, 1988, pg. 261). These criticisms led to a search for a budgeting system which could address these issues. This search is still in progress today.

Functional budgets were the first attempt to rectify the shortcomings of the executive system. They are an attempt to group expenditures by major function or broad purposes vice object of expenditure. These functions were to be arranged without regard to responsibility center or object of expense. This format has been used within the federal government for many years but did not become part of the "official" federal budget process until 1974. The Congressional Budget Act of 1974 made functional budget classifications law. (P.L. 93-344, 1974) As a result of this act the federal budget was broken down into 17 major functional categories and 4 "other' categories of expenditure. The functional areas are then broken down into subfunctions and individual programs based upon the missions of the major category. This was a good start towards performance concerns because it identified the primary functions of a government entity; however, functional budgeting did not emphasize the need for efficiency measurement within a particular function.

The third major budget reform discussed, program and performance budgets, stems from the inadequacies of the first two. The popularity of these budget styles grew from the Commission on Organization of the Executive Branch of the Government (commonly referred to as the Hoover Commission) in 1949. The Commission concluded that if the federal budget were prepared on a performance basis, centering the attention on the amount of work to be achieved, and cost of this work "...*Congressional action and*

executive direction on the scope and magnitude of the different federal activities..." could then be appropriately emphasized and compared for resource allocation (Hoover Commission, 1949). And more importantly, the cost and achievements of the federal government would be furnished to the Congress and the people.

Performance budgeting was initially mandated by amendments to the National Security Act in 1949. These amendments required DoD to install performance budgeting in the three services (63 Stat 578, 1949). The federal government as a whole entered into performance budgeting as a consequence of the Budget and Accounting Procedures Act of 1950. This act required the heads of each agency to support "*budget justifications by information on performance and program cost by organizational unit.*" (64 Stat 832, 1950) At the same time performance budgeting began to spread throughout local and state governments. Early attempts included Detroit, Mi., Kissimmee, Fl., San Diego, Ca., the states of Oklahoma, California, and Maryland, as well as many others (Seckler-Hudson, 1953, pp. 5-9). To this day, several states and cities still practice some form of performance budgeting.

The U.S. was not alone in its recognition of the beneficial aspects of performance budgeting. Nearly fifty countries implemented various aspects of performance and/or program budgets in the 1960's. Among the leaders in this endeavor were Sweden, Britain, Canada, and France. Most attempts in foreign nations merely supplemented the traditional budget and were usually issued as separate documents altogether. (Axelrod, 1988, pp. 272-3) Whether or not any major allocation of funds is affected by the performance budgets is questionable. These same problems were mirrored in the U.S. federal budget process as well.

Program and performance budgeting were to be an integral part of the Planning, Programming and Budgeting System (PPBS). The first agency to implement PPBS was the DoD in 1961 under then Secretary of Defense, Robert McNamara. PPBS was the most widespread reform movement since the executive budget. According to John Wanat, PPBS "*is an attempt to use budget preparation as an occasion to evaluate rationally the programs an agency engages in so as to choose the programs most appropriate to the agencies' goals.*" (Wanat, 1978, pp. 98-99) The system was backed up by analytical tools such as cost benefit analysis, systems analysis, and cost effectiveness analysis. This system was designed to provide greater rationality and efficiency in the allocation of resources.

Again, local, state and foreign governments jumped on the bandwagon of budgetary reform along with the federal government. After all, this reform had combined the best parts of all the previous reforms together into one large systematic package. In 1965, President Johnson announced the institution of PPBS as the budgetary system to be used throughout all federal agencies. However, PPBS proved to be far too cumbersome to be adapted on that grand a scale for most of the agencies involved. In fact the only remnants of this system lie with the agency that first introduced it, that being the DoD. Just four years after its full implementation, President Nixon killed PPBS as the federal medium for budgetary creation (Axelrod, 1988, pg. 287).

Management by Objective (MBO) was the Nixon administration's answer to the difficulties associated with the PPBS system. The focus of MBO was on selective objectives and their associated costs, along with controls to measure performance as execution of the budget occurred. This was not so much a system as it was an approach. For the Nixon administration it was a way of getting a handle on

the goals of a particular program. (Axelrod, 1988, pg. 294) Again an attempt had been made to shift the emphasis from input control to a results orientated approach based on performance measurement of specific goals. Unfortunately, the Nixon administration was beleaguered with other more pressing problems, and as a consequence MBO fell by the wayside as a budget instrument for the federal government. The end of the Nixon reign for all intents and purposes ended the MBO approach as a viable budget candidate.

The Carter administration also brought with it a reform for the budget process. Zero Based Budgeting (ZBB) was adopted to shift the focus of budgeting from sole concern with new and expanding programs to a zero based review of all programs on an annual basis. (Taylor, 1977, pp. 33-34) Again performance measurement played a vital role within the proposed reforms. When the Office of Management and Budget (OMB) divulged its guidelines for ZBB implementation, it required agencies to review several aspects of each program, including the following (Axelrod, 1988, pg. 296):

- Objectives, which should be explicit statements of output
- Performance measures to gauge efficiency, effectiveness and workload of the decision unit
- Actual measurement of accomplishments
- Resource requirements and program information

For various reasons, ZBB has taken the path of most of its predecessors. From excessive processing costs to its inability to allocate resources anymore than at the margin, ZBB had many criticisms made in its behalf. ZBB was perhaps the last of the major budget reform attempts until performance budgeting once again surfaced in the early 1990's.

What have been the effects of the past one hundred years of budget reform? While none of the major reforms exist as a whole, many pieces of each exist today throughout local, state and the federal government. Expenditure control, planning and cost evaluation, performance measurement, multi-year budgets, cost-benefit analysis, unfunded requirement review, unit costing and systems analysis are all in some way related to previous reform attempts. It should be noted that this is in no way an all inclusive list; many other legacies of reforms exist today as well. Yet, there is one acid test of budgetary reform which none of the past attempts have been able to pass since the advent of the executive budget. Allen Schick puts it best:

> *...did the innovation alter the basis for making budget decisions? Only if the answer is "yes" can an innovation be considered successful.* (Schick, 1982, pg. 91)

Since the primary base for resource allocation is still the object-of-expense, it appears Schick would say budget reforms to date have failed. Moreover, other experts in budgeting felt that because of the political nature of budgeting, several types of budget reform are doomed to failure from the start. Aaron Wildavsky claims that incrementalism is the only true budgetary process capable of success, since to do otherwise invites large-scale political warfare (Wildavsky, 1978, pg. 6). Whether the current call for performance budgeting will have any long-term effects remains to be seen.

This history has spent considerable time discussing reforms other than just performance budgeting of the 1950's. This was purposeful in that the author believes most budget reforms have been initiated in order to improve the government's programs with respect to efficient and

effective use of resources. In all the reforms presented, performance measurement played a significant role in the improvement attempts. As indicated by the past one hundred years of budget reform, performance concerns are not new. However, the reforms of the past have not been able to make performance measurement a major player within the budgetary process. To date, the ever popular "object-of-expense" still retains its allure to the reviewers of the federal budget. The Government Performance and Results Act will once again try to show the benefits of using performance measures as a resource allocation tool.

The next chapter will turn to the Department of Defense's pilot project initiatives. These pilots are a result of the GPRA and are being used as the stepping stone DoD will need to move into full implementation of performance measurement as required in FY99.

IV. DOD IMPLEMENTATION OF GPRA

A. DOD CORPORATE LEVEL

The GPRA will require all federal agencies to submit a performance plan for FY99 in the September 1997 budget submission. This plan is to include the items described in **Table 2**. While these requirements deal strictly with performance measurement, they provide a bridge to the ultimate objective of GPRA, that being performance budgeting.

Table 2: GPRA Performance Measure Requirements

1.	Establish performance goals to define the level of performance to be achieved by a program activity
2.	Express such goals in an objective, quantifiable, and measurable form
3.	Briefly describe the operational processes, skills and technology, and the human, capital, information, or other resources required to meet the performance goals
4.	Establish performance indicators to be used in measuring or assessing the relevant outputs, service levels, and outcomes of each program activity
5.	Provide a basis for comparing actual program results with the established performance goals
6.	Describe the means to be used to verify and validate measured values

Source: P.L. 103-62, 1993.

According to the Office of Management and Budget (OMB), there are 75 pilot projects located in 26 major federal agencies currently involved in the performance plan/report phase of GPRA. (Hamre, 1995) This accounts for over 20 percent of the non-postal federal work force, a rather sizeable effort for a pilot project. As a major federal agency, the DoD was selected by OMB to participate in this phase as well.

The DoD has a notable interest for involving itself in the GPRA pilot phases given its current budget status. From its peak in FY85, defense authorization had declined by 34.3 percent to its current FY95 level. Outlays for defense have declined by 25.9 percent over the same time period. (Berner and Graney, 1994, pg. 18) With the end of the Cold War, public sentiment no longer will tolerate what are perceived to be overly-generous defense budgets. However, the DoD has not experienced the corresponding decline in operating tempo one would expect with the Cold War demise. For DoD, this means doing more or doing the same with less money. The GPRA proposes to do just that for federal agencies by raising the level of efficiency and effectiveness by which they operate. Thus it has become imperative that the DoD take a serious look at how the GPRA can help it survive with budgetary constraints that do not appear to be going away soon.

The Secretary of Defense has designated the Under Secretary of Defense, Comptroller, USD(C), to lead its GPRA implementation strategy. In doing so, the USD(C) has decided to approach the GPRA from both a corporate DoD level as well as an agency perspective. The pilot projects have been conducted at agency levels vice the upper corporate layer. At the corporate level, the USD(C), along with representatives from all the other Under Secretary and Assistant Secretary Offices as well as the Joint Chiefs of Staff, have formed a working group to implement GPRA.

This group was tasked by the Secretary of Defense with developing the strategic mission statement, a DoD vision statement and DoD-wide corporate goals. (Hamre, 1995, pg. 1) **Figure 5** represents the draft version of their output to date. The intention is to include these statements in the next Defense Planning Guidance. While some minor changes may still take place, the group has reached a general

DoD Mission Statement

The mission of the DoD is to support and defend the Constitution of the U.S., to provide for the common defense of the U.S., its citizens and its allies, and to protect and advance U.S. interests around the world.

DoD Vision Statement

The DoD:
1. Successfully defends the U.S., its citizens, interests and allies.
2. Fields the best trained, best equipped, best prepared joint fighting force in the world.
3. Supports alliances and security relationships that protect and advance U.S. national security interest.
4. Advances national priorities in concert with other government agencies, Congress and the private sector.
5. Serves as a model of effective, efficient and innovative management and leadership practices.

DoD Corporate Level Goals

1. Provide flexible, ready military forces and capabilities for :
   -Rapidly projecting power to deter and, if necessary, fight and win two nearly simultaneous MRCs in concert with regional allies.
   -Supporting friends and allies, underwriting regional stability, initial crises response... through peace time overseas presence.
   -Conducting operations other than war.
   -Deterring, preventing an defending against WMD...
2. Ensure that the readiness, training, equipment and sustainability of U.S. Armed Forces are sufficient to successfully conduct all assigned missions with minimum loss of life.
3. Recruit and retain talented, highly motivated military and civilian personnel and provide them with a high quality of life.
4. Sustain and adapt existing alliances and security relationships and forge new security relationships that protect and advance U.S. interests.
5. Maintain U.S. technological superiority in areas critical to success in defense missions.
6. Support U.S. national security priorities by working closely and effectively with other government agencies, Congress and the private sector.
7. Ensure exemplary management performance across all DoD mission areas while reducing costs.

Figure 5: DoD Strategic Statements

Source: DoD Comptroller, 1995

consensus on the content of these statements. These statements are a start towards fulfilling the first major requirement of GPRA full implementation, that being to create a strategic plan.

The next step for the group is to produce the draft strategic plan. This is to be completed by 1 October 95. (Hamre, 1995, pg. I-1) This will allow the DoD to capture performance data during FY96. Thus, DoD will have 2 years of experience at performance planning and reporting at the corporate level prior to the legally mandated September 1997 submission data. The group is now engaged in developing general performance goals for each of the seven corporate level goals. Lastly, the group is looking into providing guidance in the POM (Program Objective Memorandum) Preparation Instructions for FY97-01 regarding corporate goals and performance measures. These will act as the guides for the agencies within DoD in providing performance data to the corporate level.

These are the issues currently being worked on at the upper levels of the DoD. However, the pilot projects have been delegated down to the agency levels of the DoD. This seems like a reasonable strategy for pilot implementation given the tremendous size of the DoD compared to most other federal agencies. The next section will analyze the pilot projects under the auspices of GPRA in progress within DoD.

B. PILOT PROJECT COMPARISON

In order to decide which commands would participate in the pilot projects for performance plans/reports, volunteers were solicited by the DoD. The volunteers had to be nominated by the Secretary of Defense, then final approval was required by the Director, Office of Management and Budget. (OMB, 1995) The pilots nominated and selected are the Defense Logistics Agency (DLA), Defense Commissary

Agency (DeCA), Air Combat Command (ACC), Army Research Laboratory (ARL), Commander in Chief, U.S. Atlantic Fleet (CINCLANTFLT) Carrier Battle Group and the Department of the Army, U.S. Army Corps of Engineers Civil Works Operation.

The selection of these seven agencies/commands appears to be a good mix. To start with, these commands and agencies are all volunteers in this endeavor. Using volunteers vice designees ensures a commitment by the various groups to make GPRA work. Of the commands selected, two are major combatant commands, one is a research facility and the others can be classified as service oriented agencies. This diversification in types of commands will be beneficial in determining what types of agencies will be conducive to performance measurement and what types will have problems with these measures. One might speculate that it will be easier for the service agencies than the research or operational commands to develop performance plans/reports. The difficulty with performance measurement in the research and operational cases is trying to quantify their outcomes.

The first agency selected as a pilot project within the DoD was the Defense Logistics Agency (DLA). Chosen as a pilot for all three years covered in the performance plan/report phase, DLA has already submitted performance plans for FY94 and FY95. DLA has also submitted the first performance report, for FY94, from the DoD. DLA describes itself as a Combat Support Agency, responsible for providing the Military Services with a broad range of logistics support. (Defense Logistics Agency, 1994, pg. 1) DLA employs over 58,000 civilian and military personnel. Its facilities include supply centers, distribution depots, property disposal offices, contract administration offices, and contractor in-plant residences. Annual sales of over $11 billion, distribution of $102 billion worth of material and contract administration for contracts with a face value

of over $840 billion make DLA a formidable pilot project for the GPRA. The process used by DLA in its performance planning and reporting is the subject of chapter four and will be discussed in detail at that point.

The first operational command selected as a pilot was the Air Force's Air Combat Command. ACC is the major combatant command of the Air Force with cognizance over theater, nuclear and air defense forces. Unlike most of the other pilots, ACC has taken a "non-corporate" vantage for developing their performance plans. Three operational air wings have been selected under ACC to develop their own performance plans in lieu of a corporate ACC plan. (Air Combat Command, 1994, pg. 4) These three plans were then simply collated into a single document labeled the ACC performance plan. These wings make up 13,500 personnel and have a $120 million annual budget. ACC is implementing the GPRA criteria via its "Quality Air Force" initiatives currently in progress throughout the Air Force. This seems like a reasonable endeavor since the concepts of Total Quality Leadership and performance measurement have ideological similarities. ACC has submitted a plan for FY95 and will also develop one for FY96.

The Defense Commissary Agency (DeCA) has recently undergone a consolidation process and wanted to use the GPRA pilot as a means for driving home strategic planning and process improvement. DeCA's mission statement is "To operate the most efficient and cost effective commissary system as possible". (Defense Commissary Agency, 1994, pp. i-2) DeCA has approximately 20,000 employees, 350 world wide sites, and sales of about $5.9 billion. Like the ACC, DeCA has submitted a performance plan for FY95 and will also submit one for FY96.

The Army Research Laboratory (ARL) was an interesting choice as a pilot project. The prospects of trying to

measure the output, much less outcomes, of a research facility are daunting. The ARL is the central research laboratory of the Army Material Command and employs approximately 3600 people, including 1800 scientists and engineers. (U.S. Army Research Laboratory, 1994, pp. 1-4) ARL is using its nomination as a pilot to enhance its three primary management initiatives of creating a Federated Laboratory, business process re-engineering and laboratory construction under the BRAC initiative. These initiatives are designed to produce out-sourcing in research, downsizing, and improving quality. As with the previous pilots, ARL has already submitted its first performance plan and will submit its second for FY96.

The U.S. Army Corps of Engineers Civil Works Operation is responsible for managing the water resources infrastructure that provides for navigation, flood control, hydropower, recreation and natural resources throughout the U.S. and represents 1,400 projects in all. (U.S. Army Corps, 1994, pp. v-1) The Corps is using the GPRA pilot to help enhance their O&M Program Improvement Plan. This enterprise is trying to provide a justified (effective) level of service in the least cost (efficient) manner for the Corps. The O&M funding level for the Corps is about $1.7 billion with a work force of 14,000 individuals. The Corps has submitted their first performance plan and will also submit one for FY96.

The last two pilots were officially approved by OMB in January of 1995. The Army Audit Agency (AAA) and a CINCLANTFLT Carrier Battle Group made up the final DoD pilots. The AAA is the centralized internal audit organization of the Department of the Army. The function of the AAA is to assist the Secretary of the Army in satisfying statutory and fiduciary responsibilities as well as assisting line managers in making informed decisions,

resolving issues and using resources effectively. (Army Audit Agency, 1995, pp. 1-3) The AAA has about 700 employees, including 600 professional auditors. Their interest in becoming a pilot stemmed from the Total Quality Management philosophy they adopted in 1993. Assuming their nomination would be approved, AAA submitted a performance plan for FY95 and will also provide a FY96 plan.

U.S. CINCLANTFLT was chosen as the second operational command for the GPRA pilot project within the DoD. CINCLANTFLT is the Navy Component Commander of the Unified CINC's of the Atlantic, Strategic and Southern Commands and the Navy's major force provider to Europe, Central and Special Operations Commands. (Commander In Chief, U.S. Atlantic Fleet, 1994, pp. 1-3) They have decided to use a Carrier Battle Group as the platform for their pilot project. A Group consists of approximately 11 ships, one air wing and over 7,800 military members on board. The resources required to operate a Group over its entire workup/deployment schedule is about $274 million. This cycle takes approximately 18 months to compete. The attractiveness of using a Carrier Battle Group is that it contains representatives of all the major combatant forces available to the Atlantic Fleet. This pilot will help demonstrate the ability to measure the performance of equipping, training, and operating a major combatant force. Because of the difficulty with developing performance measures for the Group, CINCLANTFLT will only participate in the project for FY96.

The preceding paragraphs have briefly described the pilot project agencies and commands. Next the thesis will take a look at the performance plans submitted by the pilots in a comparative analysis format. The definitions of the performance measures given in the third chapter will be used in comparing the measures used by the pilots.

Table 3 is a synopsis of the analysis. The first column indicates the command or agency engaged in the pilot project. The second column indicates the primary orientation of the command. (e.g., is the pilot service oriented, or operational, etc?) The third and fourth columns indicate the level of resources used by the agency in the form of budget and personnel. (The resources indicated for ACC are only those used by the three air-wings engaged in the pilot process, not the resources available to the entire ACC command.) Column five shows the total number of measures included within the pilot's first performance plan. (The DLA FY94 plan contained several other measures; however, these measures were indicated as future ones and no targets/goals had been set for them. Thus, they were not included in this analysis.)

The last five columns of Table 3 represent the five types of performance measures as described in chapter III. They are arranged on a spectrum from least difficult to capture (input) to the most difficult (outcome). Indicated for each pilot is the number of each measure included in its plan and the percentage this is of the total number of measures in its plan. (Percentages may not add up to 100% since they were rounded to the nearest whole percent.) For example, ARL has included six output measures in its FY95 plan. This makes up approximately 32 percent of the total measures in the plan. Some examples of each type of measure are provided in **Figure 6** for clarity.

Table 3: Pilot Performance Measure Comparison

COMMAND AGENCY	TYPE	BUDGET	EMPLOYEES	TOTAL MEASURES	INPUT MEASURES	OUTPUT MEASURES	EFFICIENCY	EFFECTIVE-NESS	OUTCOME
DLA	SERVICE	$14.6 Billion	~58,000	22	0/ 0%	8/ 36%	6/ 27%	8/ 36%	0/ 0%
DeCA	SERVICE	$5.9 Billion	~20,000	11	3/ 27%	3/ 27%	2/ 18%	3/ 27%	0/ 0%
ARL	RESEARCH	$570 Million	~3,600	19	10/ 52%	6/ 32%	1/ 5%	2/ 11%	0/ 0%
AAA	SERVICE	$44 Million	~700	7	1/ 14%	1/ 14%	2/ 29%	3/ 43%	0/ 0%
CORP OF ENG.	SERVICE	$1.7 Billion	~14,000	6	0/ 0%	1/ 17%	1/ 17%	4/ 67%	0/ 0%
ACC	OPS.	$120* Million	13,500*	32	6/ 19%	2/ 6%	7/ 22%	16 /50%	1/ 3%
TOTAL/ AVG %	N/A	N/A	N/A	97	20/ 21%	21/ 22%	19/ 20%	36/ 37%	1/ 1%

* These resources represent only those being applied to the pilot project air wings.

Input	Output
-Appropriated $ (DeCA)	-Disposal Sales Proceeds (DLA)
-No. of Employees on long-term training (ARL)	-No. of NRC Advisors (ARL)
Efficiency	Effectiveness
-Unit Cost per Barrel Fuels (DLA)	-Customer Satisfaction (ARL)
-Medical Work Unit Cost (ACC)	-Unit Availability (Corp of Eng)
Outcome	
-Maintenance Metric Index* (ACC)	

*This measure can only be considered an outcome from the maintenance manager's vantage, not from ACC as a whole.

Figure 6: Measurement Examples

Some rather interesting results can be gleaned from Table 3. First, a comparison of the agency size with the number of measures used might be useful. By far, the largest pilot as measured by resources used is DLA. It is approximately three times the size of the nearest pilot in both budget and personnel. Twenty-two measures for an agency this size does not seem unreasonable to the author. However, DLA does not have the largest plan with regard to number of measures. ACC tops the list with thirty-two measures in all. The budget authority covered by these thirty-two measures is less than one-tenth that of DLA's. ARL also has a large measure/ resource ratio as compared to DLA. With nineteen measures, just short of DLA's twenty-two, ARL is measuring the performance of resources with a value of about 5 percent of DLA's. In fact, DLA has the lowest measure to resource ratio of all

the plans. (The author must note that there is no magical measure/ resource ratio value, this is simply used as a point of comparison.) Overall, the trend appears to be toward more rather than fewer numbers of performance measures.

Another interesting result taken from Table 3 is how different types of agencies chose measures on the spectrum of those available. The service type commands tended to choose measures more evenly distributed across the entire spectrum of measures. This contrasts with the research and operational commands. The research command, ARL, included 84 percent of its measures in the input/output categories. The operational command shifted to the opposite end of the spectrum in that 72 percent of its measures were effectiveness and efficiency indicators. The one exception to this generality was the Army Corp of Engineers which used four of six measures of effectiveness. As can be seen by the bottom row of Table 3, the plans as a whole spread across the spectrum rather evenly. Input, output and efficiency measures all have about 20 percent of the total. Effectiveness measures are used approximately twice as often as the others. The one glaring exception is the lack of outcome measures provided. Despite the shortage of outcome measures, the plans consisted of almost 60 percent higher order measures (i.e., efficiency and effectiveness).

Some other results of the analysis conducted in conjunction with this thesis are not readily apparent from Table 3. These results address the following:

- size of the overall plan itself
- complexity of the measures
- how the measures are displayed
- relation of the measures to agency goals

- correlation with the budget
- ease of capturing the measures

Plan Size: A couple of plans appeared to be overwhelming in size. The initial DLA plan was one hundred and twenty pages long. Only forty of those pages dealt directly with the FY94 performance plan itself. The rest of the plan was used to describe the thirty-plus strategic initiatives currently in progress at DLA. Another plan which spent considerable time describing items not directly related to the performance plan was the FY95 ARL plan. Here, twenty-two pages were spent describing the "Technical Objectives" upon which management is focused. Again these objectives are only related to the performance measures indirectly. Only eleven pages were used to discuss the actual performance plan. Dis- counting DLA's first plan, average length is about 30 pages.

Plan Complexity: A few plans used performance measures which were far too complex for the average plan reviewer to understand. They were measures that only an insider would understand. An example of this is ACC's "Maintenance Metric Index". ACC defines this measure as:

> *...a summary of the maintenance effort required to support the operational squadrons and training squadrons of the 314OG. This summary is weighted. The sub elements are: mission capable, launch reliability, aircraft scheduling effectiveness, maintenance scheduling effectiveness, maintenance delivery reliability, 12 hour fix rate, break rate, combined abort rate, cann rate, delayed discrepancies, and repeat/recur average...* (ACC, 1994, pg. 17)

No less than twenty-two calculations are required to complete the measure. The eleven elements are weighted and then totalled to give a final percentage. While the eleven elements are described in the plan, several of these

elements may still not be understood by individuals outside the air community. Moreover, the final percentage is given as 94.7 percent. No targets are given and no baseline data is supplied either. Thus, an administrator would have a hard time gauging the performance associated with this measure and difficulty in deciding how much performance 94.7 percent will buy them.

Plan Arrangement: Several of the agencies found ways to display its measures in an easily understood manner. These particular plans also tended to allow the best evaluation possibilities. DLA and ARL seemed to have displays which were exceptional. An excerpt from the ARL FY95 plan shows this arrangement (ARL, 1994, pg. 24).

Metric:	Actual FY93	Goal FY94	Actual FY94	Goal FY95	Long-term goal(5+yr)
No. of invention disclosures	166	100	84*	100	110

(* YTD as of 31 May 94)

As can be seen, ARL expects their workload for Invention Disclosures to decline from its FY93 level. The baseline shown in FY93 is considerably higher than the goals set for the next several years. Also indicated is the fact they have completed 84 percent of this year's goal eight months into the fiscal year. This type of display would allow administrators to ask questions such as:

- Why was the goal reduced?
- Were the FY93 results just a fluke?
- Is downsizing causing the decline in workload?
- Is ARL phasing out this type of work?

Thus, trends can be observed from one year to another. With a breakdown of this fashion, administrators can ask

intelligent questions about the program during their assessment.

Goal Relation: Similar to the previous analysis result, some agencies seem more adept at coordinating performance measures with the overall goals of the agency. DeCA, DLA, ACC and ARL all were able to link the indicators directly to goals in an efficient manner. For example, DeCA arranged its plan such that the goal and measure were identified together; an excerpt is provided below (DeCA, 1994, pg. 5).

GOAL: MAXIMIZE CUSTOMER SATISFACTION
Objective: Improve customer service at the commissary level.
Performance Indicator: Customer Service Evaluation System.
Performance Goal: Annual increase in CSES.
Baseline: FY94-average CSES score is 86%.

This allows the administrator to identify the overall corporate goal to which the performance indicator is most closely associated.

Budget Correlation: Correlation with the budget is also a considerable concern when it comes to these plans. In all cases the plans identified the particular accounts from which it receives funds. For example, ACC indicates that it receives funds from the following accounts (ACC, 1994, pp. 8-9):

57-3500-0-1-051 (Military Personnel, A.F., partial)
57-3400-0-1-051 (Operations&Maintenance, A.F., partial)
57-3080-0-1-051 (Other Procurement, A.F., partial)

ACC receives only a portion of each fund. The activities of ACC are unique from any other command in the Air Force. However, the funds for these other commands also come from

the same accounts. Consequently, the question then becomes how administrators decide which agency gets how much funding. GPRA would base this upon the performance of the activities within the agency. Thus a disconnect exists between the activity performance and the funds which can be allocated to the activity. ACC recognizes this problem within its FY95 plan when it states:

> *While ACC has made significant strides in performance measurement, strategic planning, and integrating the Quality Air Force program into its daily operations; it at present, has limited ability to tie these programs to the budget or to derive associated cost per unit of output measures.* (ACC, 1994, pg. 8)

Ease of Capturing Measures: The last attribute looked at during the analysis of the performance plans was the ease of capturing the measures used by the agencies. Some plans included measures which would be inherently unmeasurable. These type of measures have goals which simply state "reduce", "minimize", or "develop" some aspect of a program.

A prime example of this is the Army Corp of Engineers "Industry delay cost due to unscheduled closures" measurement. The goal associated with this measure is to minimize the cost to the navigation industry resulting from unscheduled lock closures. (Corp of Engineers, 1994, pg. 5) No targets or baseline data were provided beyond this.

Several plans took this type of measure only one step farther in that they attached a numerical goal to the measure such as "increase by 10%". One such example comes from the FY95 DeCA plan. The performance indicator in question was the "DeCA regional work force diversity". The goal associated with the measure was to simply "get a 2% increase in categories which have an imbalance".

To review this chapter, the strengths and weaknesses of the plans will be summarized. First of all the strengths are presented.

First Attempts at Performance Planning: As the first agencies to produce performance plans, these pilots will help future agencies with the creation of plans when they become law.

Goal Linkage: Several plans were able to directly relate performance measures with overall strategic goals. This is extremely important since the efficient and effective accomplishment of the primary goals of an organization is what the writers of GPRA desired.

Measurement of Outputs, Efficiency and Effectiveness: As indicated by Table 3, the plans as a whole used approximately 80 percent output type measures. (Efficiency and effectiveness measures are outputs adjusted for cost or compared to pre-set standards.) GPRA specifically calls for these types of measures under section 1115.

> *...establish performance indicators to be used in measuring or assessing the relevant outputs, service levels and outcomes of each program activity.* (P.L. 103-62, 1993)

Target/Goal Indentification: A few agencies found ways to easily articulate the goals and targets for performance indicators. Providing baseline data, targets for the current year and future years allows the administrators to see trends in the program instead of just raw current year workload numbers. This also provides a means for asking intelligent questions about the program's activities and the associated performance.

Recognition of Budget Dilemma: Finally, these plans have shown how difficult a task it is to tie performance measures directly to the budget. As long as the budget continues to use object-of-expense as its primary basis,

performance measurement will have little effect on resource allocation at the federal level.

Several weaknesses in the plans were also noted during this analysis.

Bulk of Plans: Several plans were extremely large and discussed items not directly related to the performance measures contained in the plan. When GPRA-mandated plans are to be submitted in 1997, if the individual agency plans are as large in sheer volume as some of the pilots, the DoD will be swamped with data in preparing its corporate plan. To take that one step farther, OMB would seem to face a daunting task if all federal agencies were to supply such extensive performance plans.

Number of Measures: Related to the above problem is the number of plans which contained a large performance measure to resource ratio. In the DLA FY95 plan (to be discussed in more detail next chapter), the ten activities in which DLA engages are covered by only 24 measures. An average of 2.4 measures per primary activity seems appropriate.

Baseline/Targets Missing: A few plans did not contain specific target values for their measures. Several which did supply targets, failed to provide baseline data as a point of comparison. One of the obvious reasons for this problem is the fact that in many cases this is the first performance measurement occurring within the agency and therefore no previous data exists.

Lack of Outcome Measures: None of the plans contained "true" outcome measures. This can be attributed to the fact that outcomes are extremely difficult to define much less capture. This may also result from the author's broader view of outcome measures than those apparent in the pilot plans. Outcome measures should measure the impact of a program on the customers of that program. Many outcomes

cannot be measured annually and thus may be difficult to include in a GPRA plan.

Too Many Input Measures: Finally, some agencies relied heavily on input or internal measures as a means to gauge the performance of their activities. These types of measures are not required by GPRA. Moreover, some agencies used measures which only an insider would understand. Agencies need to keep in mind that the whole purpose for these plans is to report performance to external agencies. Internal and input measures are probably of little concern to external stakeholders.

This chapter described the steps currently being taken by the corporate level within DoD in its preparations for GPRA requirements to come. It also analyzed the seven performance plans which have been submitted by the various DoD agencies involved in GPRA pilot projects. All these agencies are volunteers in this process, and are therefore on the cutting edge of performance reporting for the DoD. The purpose of the analysis contained in the chapter is to identify problems associated with performance measurement and reporting in conjunction with GPRA implementation. Several features of plans were presented as examples for those agencies which will soon be required to create plans for the DoD. Also provided were some suggestions by the author as to how the plans might be presented under GPRA. The next chapter will conduct an in-depth analysis of the process used by the Defense Logistics Agency in its implementation of the Government Performance and Results Act.

V. DLA PILOT ANALYSIS

A. INTRODUCTION TO DLA

The Defense Logistics Agency was the first chosen within DoD to act as a pilot under the auspices of the GPRA. DLA is the logistics division of the DoD and provides material and logistical services to all the military services. **Figure 7** presents the strategic mission statement and vision statement as indicated by the DLA Corporate Plan.

DLA Mission: The Defense Logistics Agency is a combat support agency responsible for worldwide logistics support throughout the Department of Defense. The primary focus of the Agency is to support the warfighter in time of war and in peace, and to provide relief efforts during times of national emergency.

DLA Vision: To be the provider of choice, around the clock - around the world... providing the logistics readiness and enabling weapon systems acquisition at reduced cost... by leveraging our corporate resources against global logistics targets... and finding savings through teams, improved business practices, and technological breakthroughs.

Figure 7: DLA Mission and Vision Statements
Source: The DLA Corporate Plan, 1994.

Not only is DLA the first pilot project within DoD, but it is also by far the largest. **Figure 8** is a compilation of DLA's financial statistics which shows the annual budget authority, number of employees, and volume of the various businesses in which DLA engages. These statistics make DLA larger than the next closest pilot project within the DoD by at least three-fold.

Annual Budget	Employment	
$14.6 billion	~58,000	
Annual Sales	**Procurement**	**Contract Mgt.**
$11.6 billion	$9.4 billion	$842 billion

Figure 8: DLA Financial Statistics
Source: DLA Corporate Strategic Planning Office, 1995

The agency is currently headed by a Vice Admiral of the U.S. Navy. The organizational structure of DLA is broken down into three major business areas: Supply Management, Distribution, and Contract Management. **Figure 9** is an abbreviated version of the DLA organizational chart, showing the major offices associated with the GPRA implementation efforts. The Supply Management and Distribution functions are controlled by a Material Management Deputy Director. The Contract Management function is headed by an Acquisition Deputy Director. The final Deputy Director is in charge of the Corporate Administration Division.

The office charged with GPRA implementation is the Office of the Executive Director, Strategic Programming and Contingency Operations. This office is located within the Corporate Administration division. The performance plans created for the GPRA are developed within the Planning section of the Corporate Strategic Programming Office located within the Executive Directors office.

DLA began its pilot project on 22 October 1993 when they sent their nomination request to the Office of the Secretary of Defense. **Figure 10** is a time-line which displays the important events which have occurred

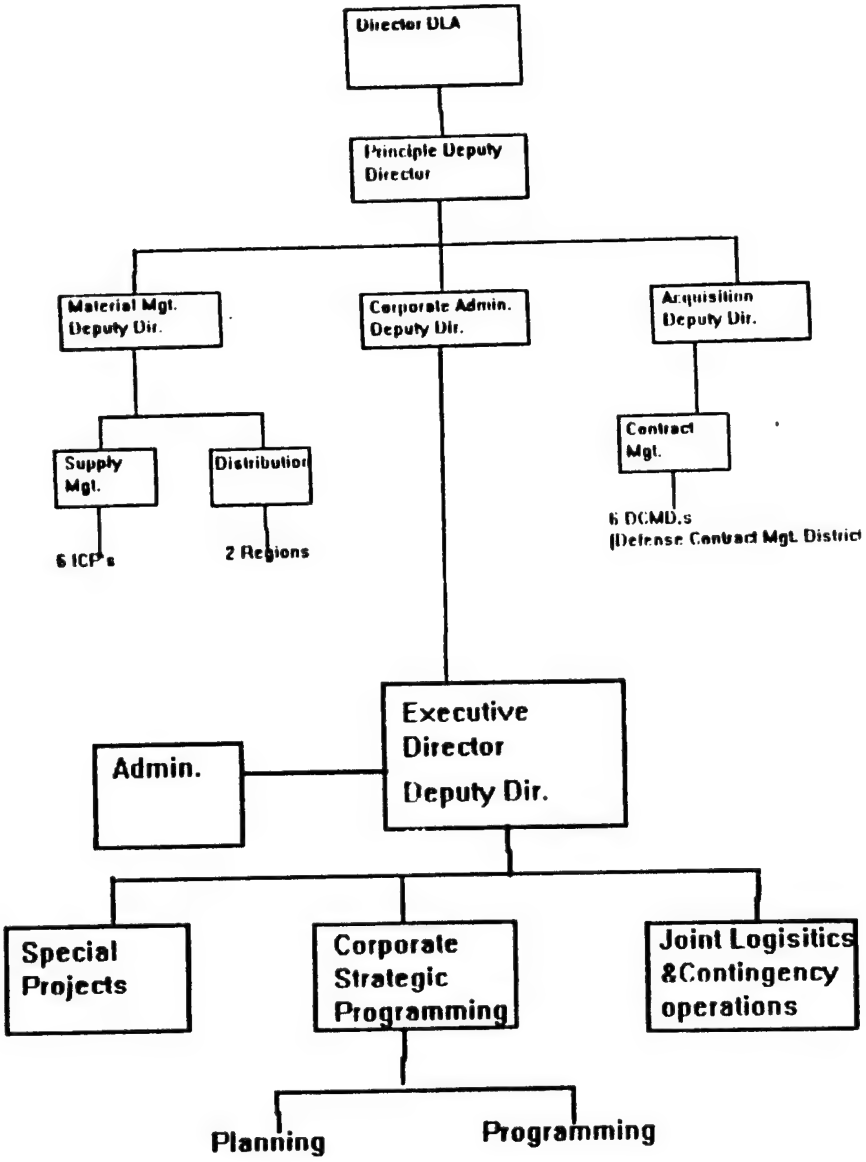


Figure 9: DLA Organizational Chart

as DLA executes its pilot project. As can be seen by Figure 10, the pilot has been rather time compressed. In a span of less than two years, DLA has had to create three performance plans, consider their position as a flexibility/ accountability pilot and write one performance report.

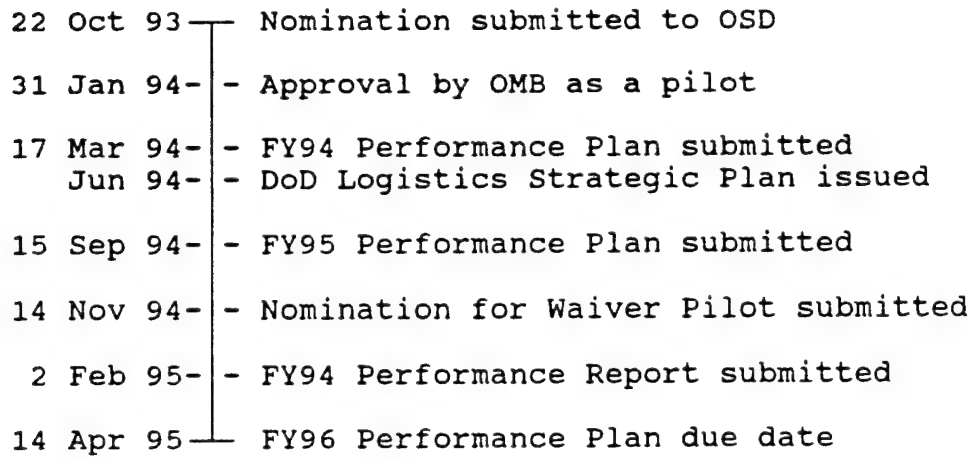


Figure 10: Time-line for DLA Pilot Phase

DLA's involvement in the GPRA pilot phase is another example of their top level management's dedication to "New Management" techniques. DLA has also been heavily involved with the National Performance Review (NPR) initiatives. As part of their Corporate and Performance Plans, DLA has identified fifty specific initiatives which are designed to improve the productivity and effectiveness of their core logistics operations. Several of these initiatives have been designated as reinvention laboratories under NPR. These initiatives are correlated with the Strategic Goals as outlined by the DLA Corporate Plan and are presented in the annual performance plans.

Figure 11 contains the strategic goals and customer-oriented goals as they are laid out in the Corporate plan. The four strategic goals were derived from the DoD Logistics Strategic Plan of 1994. Thus, DLA's corporate plan is

DLA Strategic Goals:

-Put customers first
-Improve the process of delivering logistics support
-Empower employees to get results
-Meet customer readiness and weapon systems acquisition requirements at reduced cost

DLA Customer-Oriented Goals:

-Responsiveness
-Timeliness
-Quality
-Operating Efficiency
-Financial Performance
-Customer Satisfaction

Figure 11: DLA Corporate Goals
Source: The DLA Corporate Plan, 1994.

linked directly to the DoD's logistics strategy as one would expect it to be. DLA then takes these overall strategic goals one step farther and defines them in terms of what the customer desires from its services. These are the customer-oriented goals provided in Figure 11. Once the mission statement and overall goals were in place, DLA needed performance indicators to support the goals.

B. PERFORMANCE MEASURES

The GPRA requires that each agency "*establish performance goals to define the level of performance to be achieved by a program activity*" and "*establish performance indicators to be used in measuring or assessing the relevant outputs, service levels, and outcomes of each program*

activity". (P.L. 103-62, 1993) These measures are then to be provided in the annual performance plan.

In order to comply with this requirement, DLA first had to identify the major activities in which it engages. Then they had to arrange these activities/functions by major business area. **Figure 12** presents the results of this self-analysis. As can be seen, three or four primary activities were selected for each business area. The next step was to specify performance measures for each activity.

Supply	Distribution	Contract Mgt
Supply Mgt	Receiving/shipping	Preaward Admin
Fuels	Storage Operations	Postaward Admin
Reutilization	Special Operations	Contractor Perf
National Stockpile		

Figure 12: DLA Activities
Source: DLA FY95 Performance Plan, pg. 7

As a convenient way of showing the relationship between the activity, performance measures and customer goals; DLA created an activity/measure matrix. The matrix is reproduced in **Figure 13**. On the horizontal axis, the major business area is identified along with the activities within that particular area. The vertical axis presents the performance measures broken down by the customer goal which it satisfies. Each performance indicator in the DLA performance plan supports one of the customer-oriented goals. For example, "ICP Processing Time", "Days to Close PQDR's" and "MRO/DRO Processing Time" are all performance measures which relate to the customer-oriented goal of "Timeliness". Also indicated are the two principal desired

logistic outcomes as identified by the DoD Logistics Strategic Plan of 1994. The grey shaded boxes are indicative of the performance measures which apply to the given activity (referred to as logistics operations by DLA). As an example, DLA considers "customer satisfaction" as an important measure for all activities.

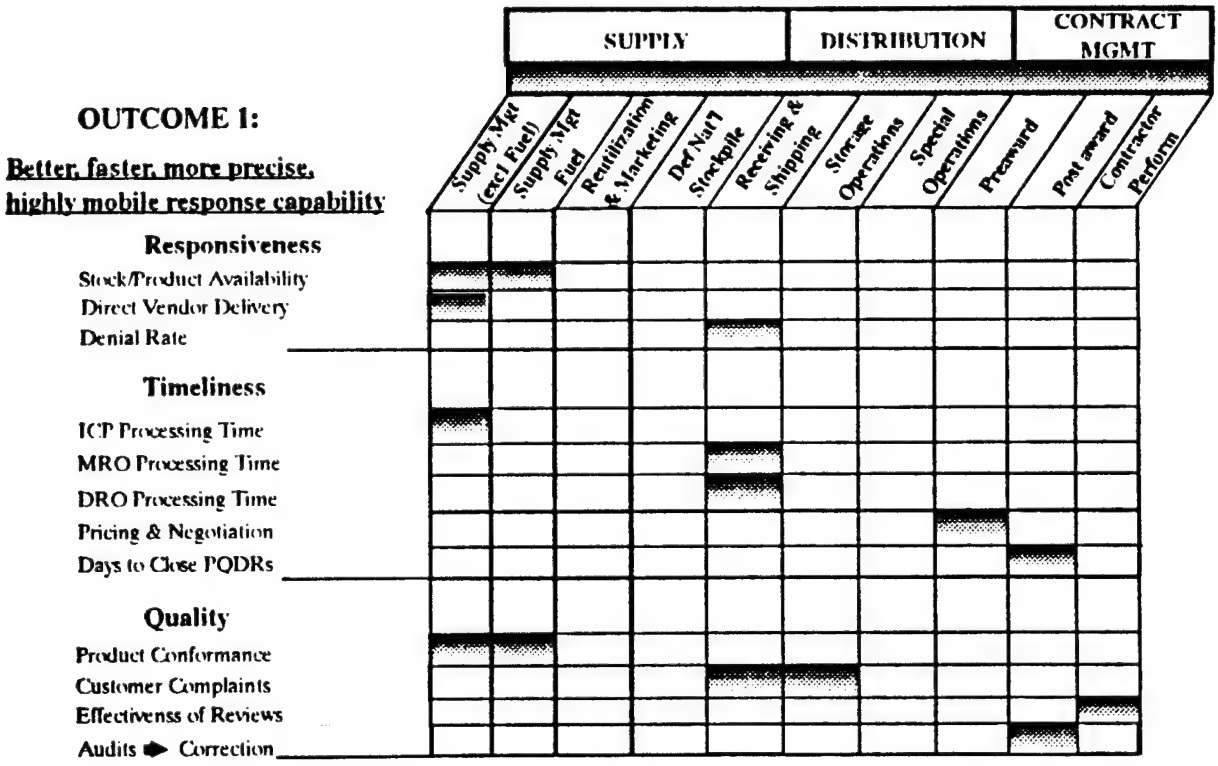


Figure 13: Activity/Measurement Matrix
Source: DLA FY95 Performance Plan, 1994

As indicated by Figure 10, DLA has submitted two performance plans to date. A comparison of the performance measures contained in each plan gives some interesting results. **Table 4** contains the results of this comparison. The Figure is arranged in similar fashion to Table 3 in chapter IV, except that the far left hand column is now the two DLA performance plans.

Table 4: DLA FY94-FY95 Measurement Comparison

DLA	Total	Input	Output	Effic-iency	Effective-ness	Outcome
FY94	22*	0/ 0%	8/ 36%	6/ 27%	8/ 36%	0/ 0%
FY95	24	0/ 0%	3/ 13%	7/ 29%	14/58%	0/ 0%

* The FY94 plan contained 24 measures which were deemed as future indicators, which were not included in this analysis.

There are two significant results which can be observed in Table 4. First of all, DLA has shifted from several output measures to only a few in its second plan. Instead, the FY95 plan contains a majority of effectiveness measures. Simple output (workload) measures are of limited use; however, when comparing them to standards or costs they become much more useful for managers. This is an indication of DLA's desire to shift more towards outcome type measures. However, the second result gleaned from this Table is the fact that DLA was still unable to include any "true" outcome measures within its plan. This testifies to the extreme difficulty in defining and capturing outcome impacts.

The performance plan itself is arranged into three sections, one for each of the major business areas. Each section contains a description of the business area, the budget relationship, the associated performance indicators from Figure 13 which apply to the area, and definitions of the various performance measures. **Figure 14** is an excerpt

from the FY95 performance plan. This particular business area is the Distribution function. The plan starts with a description of what all is involved in the distribution function.

The next portion of the plan delineates the accounts (object-of-expense) located in the President's budget (Appendix, FY95) in which the area is funded. In this case, the distribution function uses part of the DBOF, Family Housing and MilCon line item funds. Additionally, a graphic displaying the portion of total DLA funding which is applied to the area is given. This value is in turn brokendown into the amount allocated to activities in the business area.

The most important parts of the plan are the performance measures. The indicators are arranged by the customer-oriented goals. Also annotated with the measure is the activity to which it applies. These indicators are arranged into three columns. The first column gives a baseline value of the indicator if data had previously existed. (Some of the measures were brand new and no previous data was available for baseline determination.) The next two columns present the targets for the fiscal year of the plan as well as the following year.

In this section the author analyzes the performance measures contained in DLA's performance plans. In doing so, several differences became evident between how the author and DLA categorize its performance measures. As mentioned in chapter IV, all agencies are to concentrate on measures of performance which gauge the outputs or outcomes of their major activities. DLA has indicated the "category" of measure it believes the individual performance measures fit in. **Table 5** shows a comparison of how DLA categorizes its performance measures with how the author would categorize them. The author is using the definitions of performance

BUSINESS AREA: Distribution

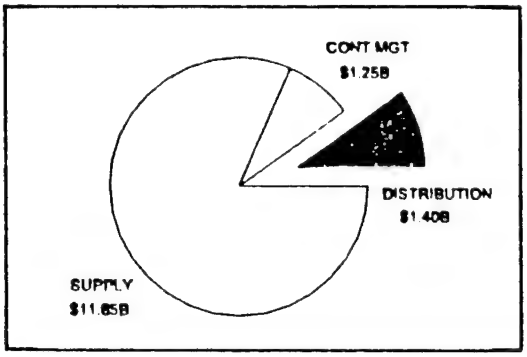
DESCRIPTION: Major functions of the Distribution business area include receiving and issuing materiel as directed by the managing inventory control points, care and preservation of materiel in storage, and other reimbursable services requested by the customer, such as unit and set assembly and assembly of deployable medical hospitals.

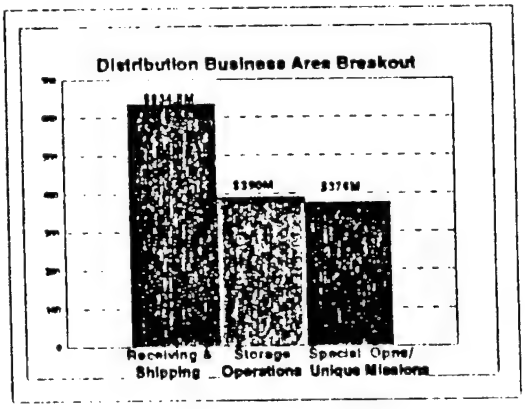
BUDGET STRUCTURE AND RESOURCE REQUIREMENTS:

Program and Financing Schedule:

97-4930-0-4-051 (Defense Business Operations Fund, partial), p. 329
97-0706-0-1-051 (Family Housing, Defense-Wide, partial) p. 326
97-0500-0-1-051 (Military Construction, Defense-Wide, partial), pp. 319-320

FY95 Budget: (millions) $1,400





Other Resource Requirements: No incremental requirements. Funded out of existing resources, DLA is pursuing a number of initiatives which are expected to enhance distribution logistics operations.

PERFORMANCE

Responsiveness	*Baseline*	*FY95 Target*	*FY96 Target*
Indicator: Denial Rate			
Logistics Operation(s)			
Receiving and Shipping	.74%	≤ 0.8%	≤ 0.8%

Timeliness	*Baseline*	*FY95 Target*	*FY96 Target*
Indicator: Materiel Release Order Processing Time			
Logistics Operation(s)			
Receiving and Shipping	Not available	≤ 1 day	≤ 1 day high priority
	Not available	≤ 7 days	≤ 6 days routine

Figure 14: Performance Plan Excerpt

Source: DLA FY95 Performance Plan, 1994

Table 5: Comparison of Performance Measure Category

	Inputs/ Internal	Outputs	Effic-iency	Effective-ness	Outcomes
DLA	5/24	8/24	0/24	0/24	12/24
Author	0/24	3/24	7/24	14/24	0/24

measures as given by the Comptroller of the DoD in this analysis. (DoD, Comptroller, 1992) The categories are the same as those used in Figure 5 of chapter IV.

Several differences can be noted from this Table. First of all, DLA classifies five of its measures as internal. Internal can be interpreted to mean inputs used within the operations of the business. For example, DLA classifies its performance measure "Space Utilization" as an internal (input) measure. Certainly, the amount of space available for storage is an input measure; however, DLA takes this measure one step farther by dividing the space occupied by the total usable space available. The author would describe this metric as a measure of effectiveness. Analysis of the other internal measures has similar results and therefore the author does not classify any of the measures as purely input measures.

Another significant difference lies in the DLA term "Business Process Outcome". The author views these measures as simply outputs of the business operations. As an example, DLA classifies its measure "Material Release Order (MRO) Processing Time" as a business process outcome. MRO Processing Time is defined as "... *the time period between when the depot receives the MRO and the time the material is offered to transportation for shipment.*" (FY95 Performance Plan, 1994, pg.16) This then is really a cycle time measurement and thus would be classified as an efficiency measure by the author.

The final major deviation between DLA's classifications and the author's is in the outcome measures. The primary mission of DLA is to provide the appropriate amount of logistical support to the services in times of war such that the services can complete their objectives successfully. The difficulty in measuring the performance of this "true" outcome becomes obvious. This measure could not be done on an annual basis. Measurement could not be completed until war had broken out and the logistical support was in fact sufficient. The next problem would be to ask how to define and capture the results of such a mission. Thus, the author believes DLA is not measuring the true outcome desired by their underlying primary mission. DLA identifies such measures as "Stock Availability", Product Conformance", and "Customer Satisfaction" as outcomes. However, the author would identify these measures as primarily efficiency and effectiveness measures.

These differences are noted to show how difficult it is to come up with agreement on appropriate measures given the different perceptions of the individuals reviewing those measures. Additionally, one agency's outcome measure may simply be another agency's input or output measure. This relationship was evident in the ACC Maintenance Metric Index analyzed in chapter four. This measure was an outcome for the maintenance function at ACC; however, it was simply an output at the corporate ACC level. This is due to the broader mission scope ACC has as opposed to the maintenance function.

The last section of the performance plan presents detailed definitions of the performance indicators. Also, a brief description may be given of how the measurement is derived. As a example, "Denial Rate" is defined as "*A percentage based on the number of requisitions denied, in whole or in part, and the total number of requisitions*

shipped." (DLA Performance Plan, 1994, pp. 16-17) In other definitions some amplifying information may be given to help the reader understand the measure. In the case of the "MRO Processing Time" measure the following was added for clarity. "*In accordance with DoD directives, we automatically downgrade to surface transportation all high priority MROs which do not have a Required Delivery Date or special project code, to realize transportation efficiencies.*" This statement helped the reader understand how the MRO Processing Time was affected by DoD policies not directly under the control of DLA.

Finally, a brief description is also supplied of how the above measures will be validated and compared to the targets. This fulfills the requirement for identifying the means of validating the measures contained in the performance plans as required by the GPRA. This function is accomplished by a performance measurement tracking system and is the subject of the next section of this thesis.

C. PERFORMANCE MEASUREMENT SYSTEM

DLA has approached the above mentioned requirement by the use of an Executive Information System (EIS). In fact, one of the many stated reasons for DLA's entrance into the pilot project was to test its newly installed EIS system. This system compares actual results as they are recorded with the targets previously established by management. This comparison is performed in near real-time and is available to all policy, regional and operating managers for review. Each of the performance indicators contained in the performance plan is tracked by the EIS. This system also tracks other performance measures as well as the fifty management initiatives currently in progress throughout DLA.

The EIS receives its inputs from various sources. Some of these sources include: direct manual input, internal data

bases such as the various business area management information systems, and external data bases such as AMIS the Air Force's contract data system. **Figure 15** shows the data input sources for the Supply business area portion of the EIS. This portion of the system alone has 22 different input sources. In total, the EIS currently has 60 sources for its data with plans to add more over the next few years.

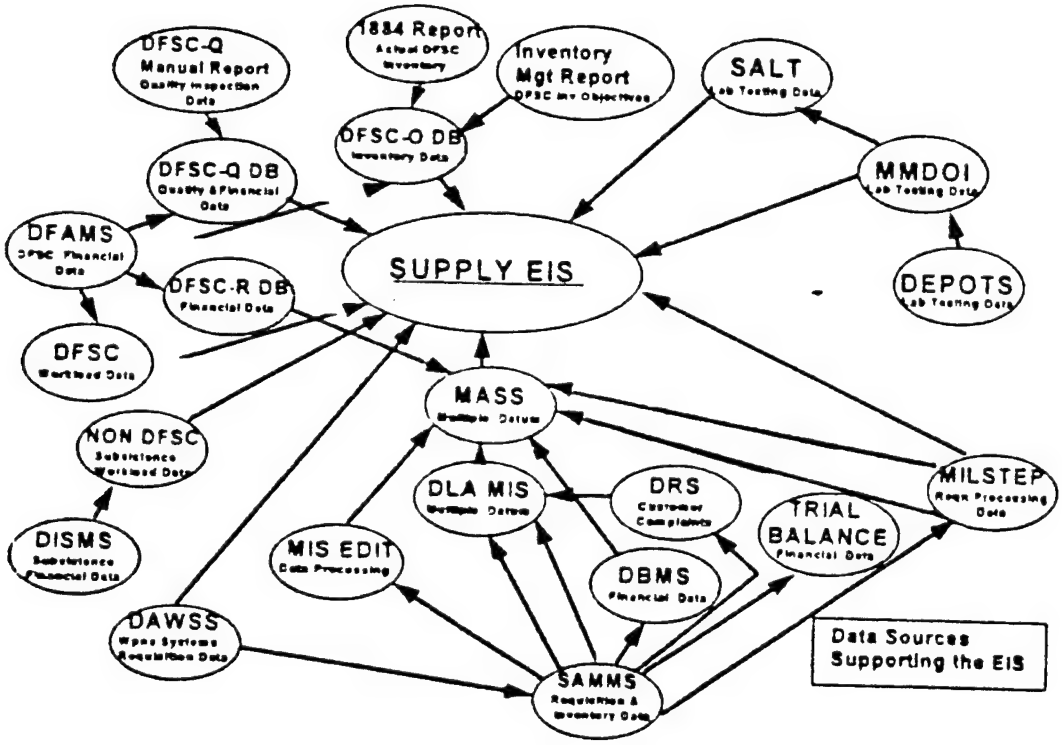


Figure 15: Supply EIS Input Sources

Source: DLA FY95 Performance Plan, 1994

As an example of how the EIS works, the path of one particular performance measure will be traced from its input sources to an EIS display screen. The measure selected was "Product Availability" for fuels. This is one of the indicators used in evaluating the Supply Management function of DLA. The customer-oriented goal of concern is "responsiveness" by DLA to a customer's request for fuel.

The specific flow path for capturing the data used to calculate this measure is given in **Figure 16**. At the field level, reports are entered giving status of local fuel supply. Additionally, data on purchases and sales is also entered into the DFSC data base. This data is compared to the Inventory Management Plan. The plan contains the fuel stock required to fulfill estimated customer requests for the year. This comparison is performed by the EIS data base system along with such other calculations as averaging and variation computations. Finally, the data is ready to be displayed on the EIS.

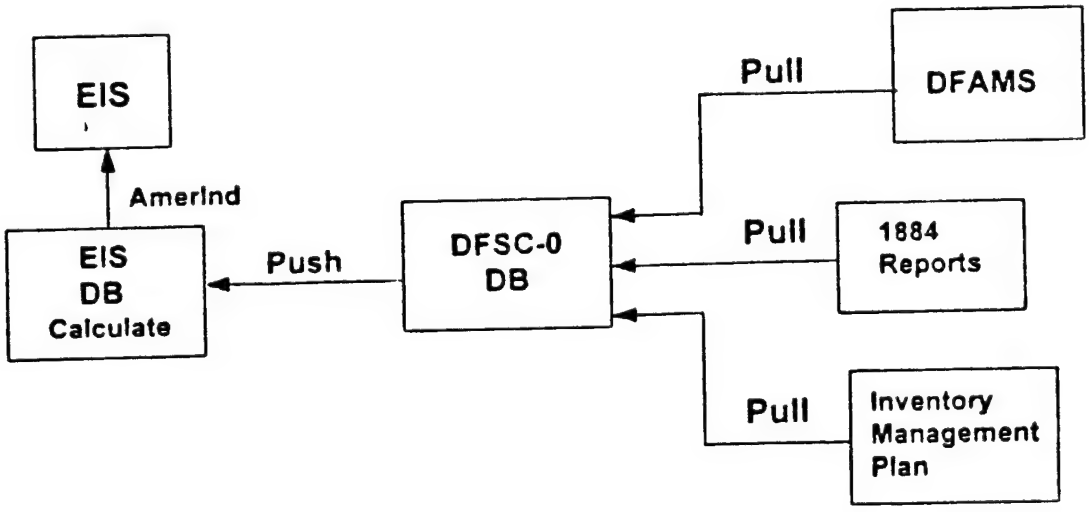


Figure 16: Product Availability Flow Path
Source: DLA Corporate Office

Figure 17 is an example of an actual display screen printed from the EIS. Displayed here is the performance trend for Product Availability (fuels). There are several bits of information which can be observed on the display. First of all, a bar graph displaying the 1991-YTD94 values for product availability is given. As can be seen, data collection for this measure began between 1991 and 1992. A declining trend is also visible from 1992 to 1993.

The next graphic to the right is a trend analysis of aggregate product availability for years 1992 and 1993. Along with the aggregate line, a line depicting the goal is included. Calculations of the mean and variation are presented as well. From this graphic, a manager might be able to recognize seasonal fluctuations, compare the actual results to the target, determine how much the measure varies, or special occurrences which may have affected the status of fuel availability. Figure 17 suggests that a large decline in fuel available occurred between the months of November 1992 and September of 1993. Therefore, the system has identified that "something" has occurred within that time period, allowing the manager to figure out what. The remaining two graphics help the manager do this.

One of the more informative capabilities of the EIS is the ability of the system to break down measures by CINC, program or region. The bottom two graphs of Figure 17 show product availability broken out by the major CINCs. This allows the manager to take his/her analysis one step farther and perhaps identify what region (or in this case, CINC) has contributed to the trends indicated above. As an example, the manager may decide to track down why the Southern Command (SOUTHCOM) has had such erratic results for this particular measure. (Perhaps extensive contingency operations have caused the fuel supply to dwindle more rapidly than normal.)

Defense Logistics Agency
Executive Information System

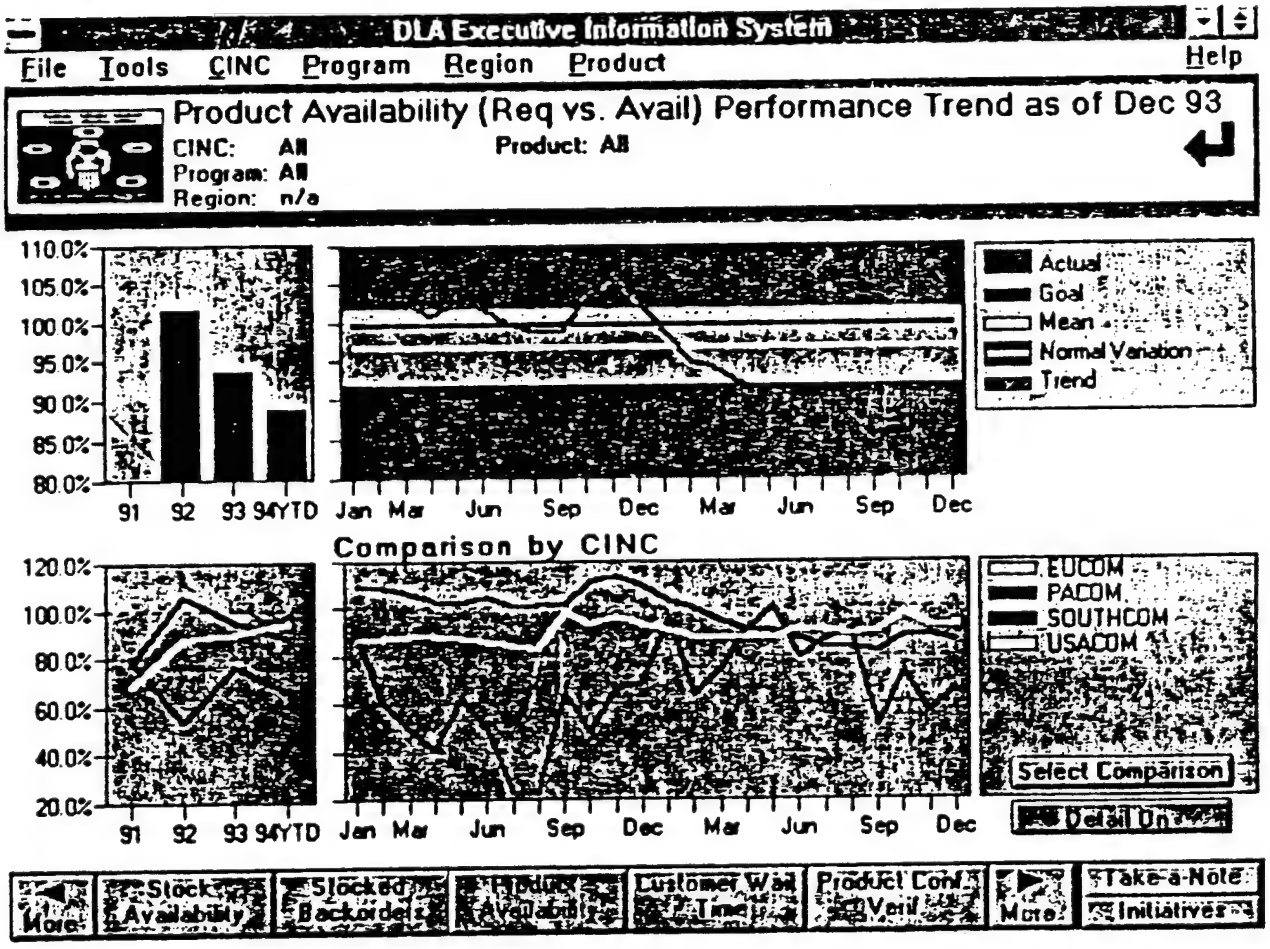


Figure 17: EIS Display Screen

Source: DLA Corporate Office

Across the very bottom of the display screen is a selection bar. This bar allows the manager to select whichever performance measure he/she may be interested in. There is also a means to enter the initiative tracking system contained in the EIS as well. (This system tracks the status of the fifty managerial initiatives currently in progress at DLA.) There are many other features of the EIS which are not discussed within the context of this thesis but are useful to the managers at DLA.

The analysis of DLA's measurement system is not meant to provide a specific model upon which to base other agency systems. Obviously, each individual agency will need its own specific system, given the unique qualities of the organization. The point is that agencies will need to have accounting systems and a means for capturing performance measurements. A cost accounting system capable of producing unit costs is essential for deriving appropriate efficiency measures.

D. EVALUATION

This section describes how the individuals at DLA feel the process of implementing GPRA is working to date. Included within the text of the section are strengths, weaknesses, difficult items to accomplish and finally, items yet to be accomplished. In formulating this section, several individuals from each business area were interviewed. Both corporate level and field activity level employees were included.

As with any new process, individuals working with the process will be able to identify many strengths and weaknesses associated with it. GPRA implementation is no exception to this rule. Thus in evaluating the process, several individuals were asked to explain what they thought might be the most pronounced strengths and weaknesses of the

system. In each case, several similar responses were given.

Strenghts: The primary strengths as indicated by the employees are given below.

- Customer satisfaction is now looked at; a survey is being used to find out just what our customers desire
- Performance measurement will now be used as a means of managerial evaluation; regional, field activity and depot included
- Aligns the efforts of the field activities to specific goals as set forth by the corporate office
- We are able to quantify things never before measurable; e.g., lead times, total asset availability...
- Vast amount of information has become available to managers at all levels
- Surfaces problems, not the symptoms of problems
- Coordination of vision all the way to the bottom of the organization; it is a systematic means of doing so

It became evident from the responses that customer concerns were the primary driving force behind DLA operations. One hundred percent of the individuals interviewed identified customer satisfaction measures as being a major strength of the new performance measurement system. Some of the customer oriented measures being used are "customer price change", "customer complaints", and an overall "customer satisfaction index" for each of the business areas. The attainment of this last measure is a major task in and of itself. DLA is currently involved with a survey of over 32,000 of its customers. This survey is to measure the baseline of customer satisfaction with DLA's services and will be used to set the targets for future year measurements.

Another major, and rather surprising response came from the field activity level managers. They said that having their own performance evaluations being based at least in part on activity performance measures was beneficial. In many cases, changing the standards by which managers are evaluated intimidates them and invokes a negative response. This is evident in the considerable amount of time spent in trying to develop a military fitness-report/evaluation system which would be deemed fair and equitable to those evaluated. This has been going on for many decades in the DoD. But in the interviews conducted for this thesis, most managers responded favorably to the change in evaluation system. Most felt this would be a more fair and equitable system than the current one, although concerns about exactly how the system would work were also evident.

A shared sense of vision from top to bottom was also mentioned as a benefit of this process. The system provides not only a sense of vision, but also a systematic means of coordinating the goals of the upper management. Simply put, the system gives "concrete" evidence of how the organization is performing. This evidence is visible to all individuals interested, and is displayed throughout the agency on its Executive Information System. Additionally, it is supplied on the performance reports and plans produced annually. Many workers become frustrated when they cannot see the results of their work in response to lofty goals set on high. Several of the individuals interviewed claimed they now have at least some idea of how their activities are performing with respect to the goals of the corporation.

The last major strength of this process stems from the system's ability to quantify data. Two of the three business areas identified the fact they can now quantify data/measures for which they previously only had a "feeling". A specific example mentioned was various lead

times. Previously, no systematic means existed for measuring the time it took to complete a specific activity. Now several lead/cycle time measurements are included in the performance plan for DLA. Examples include: MRO Processing Time, Logistics Response Time, and Days to Close PQDR's. Now that an automated system is available, these times can be measured rather easily.

Weaknesses: Interviewees also identified several weaknesses associated with their performance measurement process. The major concerns are provided below.

- Lack of automation for all performance measures; i.e., a large amount of data is still entered by hand
- Too many measures to start with, would be better if we had just one measure for each activity
- Data integrity, timeliness
- Performance measure definitions are not all perceived the same; i.e., keep them very simple
- Incompatibility among the various information systems
- Traditional measures still being used in many cases; (especially in supply management) many measures used are not a concern of the customers

The first major weakness which will be discussed deals with the type of measures reported. According to the interviewees, too many non-customer oriented measures are still being used (i.e., internal/input measures). An example might be the "space utilization" measure. While this is certainly important to the managers at DLA, customers probably would not be interested in how space is used at DLA. Additionally, stakeholders in the process such as plan reviewers are more concerned with the overall objectives of the organization as opposed to internal measures. The general consensus among interviewees was that while significant strides had been made at shifting towards

customer oriented goals and measures, more work still needed to be done.

The next weakness is related to the previous one. Responses indicated that many employees thought too many "traditional" measures were being used, or that too many measures in general were provided. The Supply Management business area seemed to feel the strongest about this weakness. However, a comparison of the FY94 and FY95 performance plans conveys results to the contrary. **Table 6** displays this data. The Table shows the three business areas and the number of measures deleted from FY94 plan as well as the number of those added in the FY95 plan. Of the ten FY94 supply management measures, only five survived to the FY95 plan. Additionally, six new measures were added. Results for the other two areas are similar. In the case of the Contract Management, a wholesale change-out of measures occurred. Thus, it would appear that DLA is shifting away from some of their traditional measures.

Table 6: Performance Measure Comparison

FY94 to FY95	Supply Mgt	Distribution	Contract Mgt
Deleted	5	4	3
Added	6	3	7
Total FY95	11	8	7

Where sheer volume of measures is concerned, twenty-four measures for an agency with ~58,000 employees could be arguably appropriate. This gives each of the ten primary activities (see Figure 13) an average of 2.4 measures each. This does not seem to be an unreasonable amount. Thus the data do not necessarily suggest that too many measures are being used in this case.

The third weakness indicated is the incompatibility of many of the information systems associated with DLA. This problem stems from the fact that DLA underwent a major consolidation effort at the start of the 1990's. Base closure, downsizing, and rightsizing all have helped lead to DLA absorbing the logistics functions of the three services. When this occurred, DLA inherited many different information systems and data bases which were not compatible with DLA's systems. This is a problem associated with many agencies which are undergoing consolidation processes. DLA is currently engaged in integrating these various systems via its "process" strategic goal initiatives.

The final weaknesses stems in part from the previous problem. Many interviewees indicated their concern with data integrity and timeliness. This problem originates in the fact that many inputs to the EIS are still made by hand. This is a result of the incompatibility among the systems previously mentioned. Certainly, many performance measurement systems have problems with data integrity. Whether or not incorrect data is entered purposefully or by mistake, erroneous data will show up. This problem will be alleviated somewhat when all the information systems are integrated. Still at some point data will have to be manually entered.

Most Difficult Item: These weaknesses are examples of just how difficult it can be to introduce a new process into an organization. One of the questions asked of the individuals interviewed was what they thought was the most difficult item to achieve to date in this implementation process. Three overwhelming responses were evident. These responses are provided below.

- Convincing the field activities that this is for real, not just another program, it is the law

- Getting reliable data from systems that don't communicate together
- Developing appropriate measures for the goals expressed by upper management

The last two problems were identified as weaknesses and were discussed earlier. The first item is perhaps the hardest of all to accomplish. This requires a change in employees' beliefs, not just hardware connections or resources to purchase needed items. The GPRA is in fact a law whose major thrust will require action by all federal agencies in 1997. As mentioned earlier in this thesis, this subject appears to cross party lines in Congress and therefore does not appear to be in danger of being repealed anytime in the near future. The sooner agencies are able to convince their personnel of this fact the better equipped they will be to deal with the requirements of this law.

Future Problem: Another question asked of the interviewees was what they thought remains the most significant problem to overcome in the future. The response given was the transition from the current budget system to a performance budget system. GPRA does not provide for performance budgeting within the law; but, the long term goal of GPRA seems to be aimed at using performance budgeting for the federal budget process. The basic question here was how the performance measures were going to translate into a resource allocation tool.

DLA has started to include GPRA performance reporting into their Planning, Programming, Budgeting and Execution (PPBE) cycle. In FY95's PPBE schedule memorandum, outlined by the Executive Director of Strategic Programming and Contingency Operations, performance was a primary issue to be considered. This was evidenced by the significant emphasis the director placed on performance as indicated in the quote from the schedule.

We must use the PPBE process to maintain the momentum you have put in motion to reduce customer costs, improve performance, and achieve DLA's strategic goals. Your continued involvement in the process assures DLA will be the DoD example for a disciplined, performance-based process in all elements of PPBE. (Gallo, 1995)

According to the PPBE memorandum, future plans will incorporate the performance measures associated with GPRA. This will be accomplished via Primary Level Field Activity (PLFA) plans. The activity level plans will document the PLFA goals and objectives. The activity commanders will then be held accountable to these goals in that the plan becomes a performance contract between the activity commander and the corporate office. This then becomes the PLFA's stated compliance with GPRA and is the basis for the PLFA programming and budget requirements. The PLFA plans are then aggregated into the business area plans for the fiscal year. Business area plans in turn should directly support the DLA Corporate Plan. This makes up the bulk of the planning portion of the PPBE cycle for DLA.

Figure 18 is a graphic representation of DLA's integrated PPBE schedule. This graphic shows the timing associated with the DLA system in order to meet the external requirements placed on them by OUSD(A&T). (DLA submits their budget request via the Office of the Under Secretary of Defense for Acquisition and Technology) The performance plans under GPRA will be submitted to the OUSD(C) in August of the year in which the budget will be prepared. (Currently, performance plans for the DoD are being handled by the DoD Comptroller. Whether or not this continues after full implementation is in question.) For example, the performance plans for FY97 will be submitted to the Comptroller office in August of 1995. This will facilitate use of the performance plans as a means for budget

consideration. The performance reports will be submitted in January of the year immediately following the fiscal year of the associated performance plan. This will hopefully provide ample time for review by OUSD(C) and OMB in order to allow for feedback to the agencies prior to the next year's plan submission.

The Programming portion of the DLA PPBE system consists of presentations of the Business Area Plans by the business area managers. The presentations are an assessment of the future performance goals, resource requirements, and programs needed to achieve performance goals. (Gallo, 1995) Since the resources for DLA are controlled primarily by customer needs (DBOF activities are funded by customer estimates of required services), the Business Area managers must consider tradeoffs between resourcing levels and performance projections. This then is an assessment of the risk in achieving performance goals given a constraint in resources.

DLA seems to be well on its way to including performance measures within the PPBE system. The problem which needs to be addressed is how these performance tradeoffs will be incorporated into the budgeting portion of the process. As noted earlier in this thesis, the President's Budget is broken down by object-of-expense. However, performance based budgeting relies on activities as a base for fund allocation. The goals and performance measures used by DLA in implementing GPRA are based upon the activities which they perform. Since there is no direct correlation with the funds available in the budget and the activities DLA performs, a gap occurs when considering how much funding should be applied to where. This is the major concern of those who responded to the question of the most difficult item yet to be accomplished.

Defense Logistics Agency
Integrated Planning Schedule

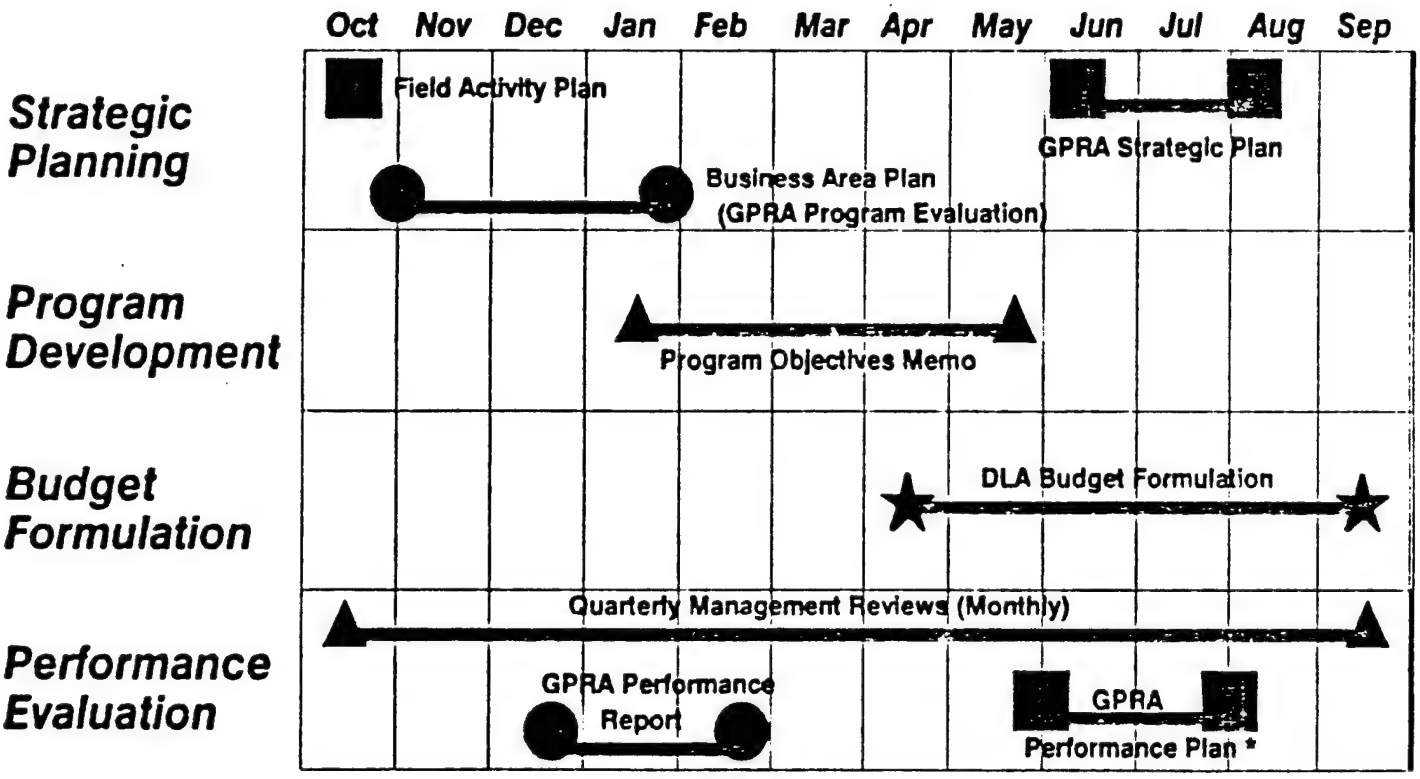


Figure 18: DLA PPBE Schedule

Source: PPBE Memorandum, 1995

E. CONCLUSION

This chapter has described and evaluated the process by which DLA is implementing its GPRA pilot project. This agency was chosen because of its two plus years of experience with GPRA. The chapter described the performance measures used by DLA. It then went on to describe the systematic means by which these measures are captured. Finally, a look at how the individuals who operate within the process view the process was also presented. The purpose of the chapter was to provide other agencies with ideas of how to accomplish this task. Lessons learned by DLA can be useful to others in their attempts at implementing GPRA in 1997.

As seen in the chapter, performance plans/measures will undoubtably change several times before a final set of measures is decided upon. In DLA's case, over 66 percent of the FY95 plan measures were not part of the FY94 plan. Similarly, the plan itself shrunk from almost 120 pages down to just 24 pages. This should warn agencies who will engage in GPRA plan writing that plans and measures are not easily generated. This is a process which will probably take several iterations to complete.

Secondly, the performance measurement system developed by DLA was not meant to be a model for other agencies to follow. On the contrary, this system was specific to DLA only and would not work for any other agency as is. This analysis was performed to show that DLA already had a performance measurement tracking means available to them. Many other agencies will not have this luxury; as a consequence they may take significantly longer to develop a means for validating and monitoring performance. Good cost accounting systems and performance tracking systems are a

must if performance measurement is to impact resource allocation significantly.

Several strengths and weaknesses of the GPRA implementation process were also identified within the context of this chapter. Managers at DLA seemed pleased that customer satisfaction was becoming a primary driving force for DLA. However, they felt more measures should be directly linked to customer concerns. Managers also appeared motivated by the fact that personal evaluations would be based upon the performance measures for the activity over which they held control. Many employees felt a sense of vision concerning performance now permeates the organization. And finally, data never before captured is now being used daily to measure performance.

On the other hand, several measures still require hand input according to the managers. Therefore, considerable concern over data integrity and timeliness was indicated at the corporate office levels. Additionally, many members felt that "traditional" measures were still being used far too often. The data analysis by the author suggested that a shift away from traditional measures appears to be in progress despite the feeling of those interviewed. Perhaps the most significant difficulty faced by the administration at DLA is motivating its workers to realize GPRA is not <u>just another program</u>.

Lastly, considerable concern as to how GPRA performance measurement will be reflected in resource allocation has been voiced at DLA. DLA has attempted to bridge this gap by using the Activity Level Performance Plans as a performance contract with the corporate office. While this is an internal fix for DLA, the federal government still has significant problems with resource allocation between agencies without an activity based budgeting format.

Chapter VI will provide the lessons learned from this and previous chapters as well. Recommendations for how other DoD agencies can implement GPRA will be provided.

VI. CONCLUSIONS/RECOMMENDATIONS

A. RECOMMENDATIONS

This section provides the recommendations by the author based upon the research conducted in writing this thesis. In general these recommendations are directed at agencies who will prepare performance plans under the auspices of GPRA in the near future.

1. Agencies should start working now. Several aspects of performance planning will take considerable time to work out. As shown in the case of DLA, subsequent performance plans created may not look anything like the initial one. DLA changed 66 percent of its performance measures in the first year alone after realizing the measures were not appropriate. Additionally, the sheer size of its plan was significantly reduced over the two years. These plans will be required for submittal in September of 1997. DoD will need to decide at what level these plans will be required. Will the plans be directly linked to the budget submittal and thereby be required at every level, or just the corporate agency level?

2. Agencies should keep the plans simple. Several examples throughout the thesis were given to show that simplicity seems to be the best way to approach GPRA performance plans. Large convoluted measures which would be difficult for an outside administrator to understand are not beneficial in gauging performance. Moreover, verbose explanations of future GPRA implementation plans or of items not directly related to the measures themselves should not be provided. The plans should state the mission and vision of the organizations. The measures, their targets, baseline data if available, and perhaps a long-term goals should be identified as well. Definitions of the measures should be provided for clarity. Finally, a means for validating the

measures as well as their relationship to the budget is also required by GPRA. These plans will be aggregated all the way to a federal government level by the OMB. If the plans are as large and complex as some of the pilot plans, DoD and OMB will be faced with a daunting task in formulating a reasonable plan from the subordinate plans.

3. Agencies should first identify the primary activities in which they engage. This in-turn will help identify the measures of performance to be used in gauging these activities. As DLA did when it created its second plan, deciding upon the activities will help clarify just what measures to look at. Additionally, if performance budgeting is the long-term goal of GPRA, activities will be used as the basis for the budgets. In the meantime, identifying the activities in which the organization engages will be beneficial to the managers with oversight.

4. Some of the examples contained within this thesis should be used for benchmarking. This is especially true when it comes to displaying the measures in annual plans. Of all the plans reviewed for this thesis, DLA had the most easily understood format in its FY95 plan. Moreover, this plan was fairly simple and concise at 24 pages. Arranging the plans in a similar fashion as Figure 2 and Figure 14 makes them easily understood and allows for trend analysis over a range of years. The particular types of measures chosen by the pilots may also fit into other organization plans.

5. Agencies should realize their measures may not be interpreted as expected. As shown in this chapter, DLA feels that a great number of its measures are of the outcome type. The author, on the other hand, takes a broader view of outcomes and therefore was in disagreement with DLA on several measures. Based on this analysis, outcomes were by far the most difficult to capture. Very few agencies were

able to include true outcome measures in their plans. Moreover, outcome measures may not even be measurable on an annual basis. Some of these outcomes take years to achieve depending on the orientation of the agency. For example, one of DLA's primary missions is to provide adequate logistics support to the services in times of war to ensure a successful campaign. This outcome goal could only be measured in retrospect after a conflict had occurred.

6. Agencies should concentrate on measures of efficiency and effectiveness. While outcome measures should be included if possible, efficiency and effectiveness measures are more attainable and should be used as much as possible. Simple measures of output are not nearly as useful as efficiency or effectiveness measures are. Input measures are not required by GPRA and in general are not of interest to outside stakeholders. Many examples of these measures are contained within this report.

7. Good accounting and performance measurement systems are required to implement GPRA in an efficient manner. DLA already had an Executive Information System in place when it volunteered to act as a pilot project. This system is an excellent way to monitor performance throughout the organization. Agencies will need both types of systems in order to capture the data necessary for GPRA implementation. Therefore, agencies should start looking at how to accomplish this task as early as possible. Also indicated in the analysis of DLA's system was the fact that it is still changing to suit DLA's needs.

8. Agencies should link together several initiatives currently in progress within the DoD. GPRA fits neatly into the initiatives such as Total Quality Leadership/Management and the National Performance Review. Most of the pilot projects used GPRA as a means to enhance initiatives already in progress in its organization. For example, the Army Corp

of Engineers entered into the pilot phase as an extension of its National Operation and Maintenance Program Plan of Improvement. The tools contained within TQL/M would benefit managers as they attempt to create performance indicators and plans. For example, the Delphi method could be used to establish the primary activities the organization wishes to measure. Additionally, agencies should also use current goals and statements as a starting point. For example, the mission, vision and primary activity goals for the Department of the Navy are already contained in its "Forward... from the Sea" document. Therefore it would be inefficient to start the process from scratch when some of the data required is already in existence.

9. Agencies should look at how the performance plans would be linked to resource allocation. Perhaps the most difficult item to complete in all of GPRA implementation will be to find how the measures will be used to allocate resources. DLA has started this process by creating a performance contract between its field activity managers and the corporate office. Whether or not this could occur on a federal or even DoD level is still subject to question. The primary stumbling block at the federal level is the object-of-expense base currently used in the federal budget process.

10. Finally, agencies should realize that GPRA implementation is not just a budget drill. Performance measurement is beneficial to the managers who run the organization. Moreover, several uses for performance measures can be given. A study by the Urban Institute suggests nine potential uses for performance measures (Hatry et al, 1977, pp. 195-199).

- Reviewing the progress and trends of government services.

- Guiding resource allocation decisions...by area, clientele.
- Helping support budget preparation and justification.
- Contributing to in-depth program evaluation and analysis.
- Developing performance incentives emphasizing quality for government employees.
- Controlling the quality of performance for services contracted out.
- Checking efficiency measures for quality. (This is a function of effectiveness measures specifically.)
- Providing a managerial control system for resource reallocation.
- Improving communication between government and citizens...through surveys, observers, complaint bureaus.

These functions were originally discussed as those provided by effectiveness measures only. However, the author feels these functions are provided by performance measurement in general. As can be seen by the above list, budget formulation is an important part of performance measurement, but not the only part. Managerial and program control are greatly enhanced by measuring the performance of activities in which a program engages.

These suggestions provided are by no means all inclusive. Other results of this analysis may help agencies in developing future performance plans under the auspices of GPRA. The examples provided in this study are the first to be developed under GPRA and most certainly will be improved upon as more subsequent plans are created.

B. FUTURE RESEARCH SUGGESTIONS

Since this process is so new, agencies will undoubtably be searching for help on establishing plans. For this reason, the analysis contained within this thesis is only a starting point from which further research can be launched. The following are a few suggestions for future research in this area.

- A comparison between the first plan submitted and the second plan submitted for all the pilots could be completed when the FY96 plans are finished in much the same way as the DLA FY94 and FY95 plans were compared in this thesis.
- Significant research needs to be completed on how the performance plans under GPRA could be linked to the DoD PPBS budget process. Moreover, a link to the federal budget process is also needed.
- An analysis of how to define and capture outcome measures for DoD agencies is desperately needed.
- A look at how these individual agency plans might be aggregated into a DoD corporate plan would be beneficial as well. Additionally, this could be taken one step farther and a federal wide aggregation could be analyzed as well.

In summary, this chapter provided as a means to direct the reader to the important portions of the chapter. A list of recommendations based upon the results of this analysis were provided. These will be helpful to agencies which will start creating performance plans in the near future. Several examples were given as a source of benchmarking for the agencies looking towards GPRA implementation. Lastly, some areas for further research were presented as a possible source for future theses.

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